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PETTY'S PLACE IN THE HISTORY OF
ECONOMIC THEORY.

THE economic and statistical writings of Sir William Petty (1623-1687) are only a fraction of the total output of his diligent pen. Still their bulk is as great as that of Ricardo's *Principles* and nearly twice that of Menger's *Grundsätze*.* To give an exhaustive account of them in the pages of this Journal is, therefore, impracticable. Lack of space equally with lack of knowledge precludes likewise the indication here of all the actual or possible relations between them and the writings of later economists. This is, however, by no means a ground for un-mixed regret. Laborious disentanglement of the course of thought concerning this or that economic problem has, no doubt, its usefulness. But the value of such elaborate *Dogmengeschichte* as has been produced by Zuckerkandl †

* The original pamphlets have become scarce. They are reprinted in *The Economic Writings of Sir William Petty, together with the Observations upon the Bills of Mortality*, more probably by Captain John Graunt. Edited by C. H. Hall. Cambridge: at the University Press. 1899. 2 vols., 8vo.

† *Zur Theorie des Preises, mit besonderer Berücksichtigung der geschichtlichen Entwicklung der Lehre*, 1889.

and Bergmann*—I select two writers who assign to Petty a prominent place—seems to lie quite as much in the intellectual stimulus afforded by a comprehensive survey of the subject from differing points of view as in any contribution made to our understanding of the way in which knowledge grows or theory accretes. No doubt a closer and closer interfiliation of theories does take place as the class of professional economists becomes more numerous and active, the discussions in journals more frequent and animated. But two hundred years ago our apparatus for conserving and incubating economic ideas did not exist. Writers of that day for the most part turned their attention but casually to the field of economic pamphleteering, and were as disregarding of their predecessors as their successors were of them. In treating of a seventeenth-century economist, therefore, I believe that more false inferences will be avoided than truths overpassed by refusing to recognize any lines of descent except those that can be clearly proved in court.

I.

William Petty was born May 26, 1623, at Romsey, in Hampshire, where his father was a poor clothier. Like many another English refugee during the Civil War, he made his way, by various shifts, to Utrecht and Leyden. There, as well as in Amsterdam and Paris, he studied languages, chemistry, and medicine. In 1648 the Parliamentary party, bent upon reorganizing Royalist Oxford, made him Fellow of Brasenose College, and soon afterwards Professor of Anatomy. Two years later he was further advanced to be physician for the army in Ireland, and soon became a confidant of Henry Cromwell, whom he served as clerk of the council at Dublin until shortly before the Res-

* *Geschichte der nationalökonomischen Krisentheorien.* 1895.

toration. While there he executed with great success the famous "Down Survey" * of the forfeited lands of the rebellious Irish. Incidentally he speculated in land debentures and laid the foundations of his large fortune. In 1661 he was knighted by Charles II.; and, finding a little leisure for the first time in a decade, he turned his attention once more to science. He helped to organize the Royal Society, in whose prenatal activities he had participated at Oxford. He read several papers before it. He experimented at length with a "double bottom boat," which seems to have been a sort of catamaran. In 1666 he resumed his residence in Ireland. There lawsuits about his lands and the demands of the flourishing "industrial colony of Protestants" which he had established at Kenmare in Kerry took most of his time for the ensuing twenty years. He was able, however, to make repeated and prolonged visits to London, and to agitate with vigor for fiscal reforms in Ireland. But the exchequer of Charles II. could ill afford to reject any proposal, however harmful to that island, which promised ready cash at Whitehall; and Petty's arguments in favor of the direct collection of taxes and of establishing a statistical office fell upon deaf ears. The accession of James II., who as Duke of York and Lord High Admiral had taken an interest in Petty's shipbuilding experiments, greatly raised his hopes of ultimate success; and he put forth a dozen essays to prove his case. But he was destined to renewed disappointment, and died December 16, 1687, his public aims unachieved.†

Of Petty's abilities his friends held an exalted opinion. Evelyn, for example, declared him so exceedingly nice in sifting and examining all possible contingencies that he ventured at nothing which was not demonstration. There was not in the whole world his equal for a superin-

* So called because "set down upon maps."

† On the biographies of Petty see note in *Economic Writings*, i. xiii.

tendent of manufactures and improvement of trade or to govern a plantation. "If I were a prince, I should make him my second counsellor at least. There is nothing difficult to him. . . . He never could get favor at court because he outwitted all the projectors who came near him. Having never known such another genius, I cannot but mention these particulars among a multitude of others that I could produce." *

The following are the titles of Petty's economic writings, with the probable years of their composition and the dates of their first publication. It will be noted that several of the most important were not printed until after his death.

A Treatise of Taxes and Contributions. Written and printed in 1682.

Verbum Sapienti, or an Account of the Wealth and Expences of England, and the Method of raising Taxes in the most Equal Manner. Written in 1685, printed 1691.

The Political Anatomy of Ireland. Written in 1671-72, printed 1691.

Political Arithmetick, or a Discourse concerning the Extent and Value of Lands, People, Buildings, . . . etc. As the same relates . . . to the Territories of . . . Great Britain, . . . Holland, Zealand, and France. Written 1672-76, printed 1690 (and surreptitiously by a "pirate" of those days in 1683).

Quantulumcunque concerning Money. Written 1682, printed 1695 (and perhaps in 1682. *Writings*, ii. 438, 639).

Another Essay in Political Arithmetick concerning the Growth of the City of London. Written 1682, printed 1683. (The first essay is lost.)

Observations (and further Observation) upon the Dublin Bills of Mortality. Written and printed 1683 and 1686.

Two Essays in Political Arithmetick concerning London and Paris. 1687.

Observations upon the Cities of London and Rome. 1687.

Five Essays in Political Arithmetick. 1687.

A Treatise of Ireland. Written 1687, printed 1899.

* Evelyn's *Diary*, March 22, 1675.

The list is divisible into three chronological groups, each corresponding to a distinct period in Petty's life, and containing books that have a common provocation and common characteristics. The first group was produced in London after Petty had given up his arduous positions as physician to the army, surveyor of Ireland, and clerk of the Irish privy council, and before he was obliged to return to that island in order to defend the title of his lands in the Court of Claims. The two pamphlets of this group are directly due, respectively, to the fiscal discussions ensuing upon the Restoration and to the expensiveness of Charles II.'s first Dutch war. Their characteristic subject, accordingly, is taxation. But they contain such digressions to other topics as constitute them, for the student of economic theory, the most interesting of all Petty's writings.

The second group contains his best-known pamphlets, *The Political Anatomy of Ireland* and the *Political Arithmetick*. They were written in Ireland after his affairs there had settled into a satisfactory prosperity and he once more had leisure to exercise his mind upon those topics that he especially loved. The direct impulse to their writing came from Dr. Edward Chamberlayne's *Present State of England*, published in 1669,—a book, by the way, which seldom receives nowadays the attention that it deserves. In January, 1671, when a new edition of Chamberlayne's work was in prospect, Sir Joseph Williamson, later principal secretary of state, suggested to its author the addition of some matter regarding Ireland. Chamberlayne appealed for assistance to Petty, who chanced to be in London at the time; and Petty appears to have been so pleased with the idea that he decided to carry it out himself. Soon thereafter he began another pamphlet treating of England. To this he gave the title *Political Arithmetick*, which his work has made famous. This title, too, has the advantage of characterizing for us

the entire output of his second period of activity as an economic writer. *The Political Anatomy* and the *Political Arithmetick* are the forerunners, if not the direct ancestors, of eighteenth-century "statistics," the *Staatenkunde* of Achenwall and Schlözer.

The more numerous but briefer pamphlets of the third group were written, with one exception,* during such visits as he made to London, after 1682, to work for reforms in Ireland, and incidentally to enjoy the company of his friends in the Royal Society. Their external provocation is to be found in the relation existing between the Courts of Versailles and Whitehall, and especially in the dispute whether London were a larger city than Paris. Their character is due to their lineal descent from Graunt's *Observations upon the Bills of Mortality of London*. It may best be described by saying that they are not merely the forerunners, but the direct ancestors, of Süssmilch and of modern vital statistics.

The *Natural and Political Observations made upon the Bills of Mortality*, by Captain John Graunt, citizen of London, 1662, bear so intimate a relation to this third group of Petty's writings, and they are themselves of such importance in the history of statistics, that, if they were really written by Petty, as some assert, he should not be deprived of the credit which their author unquestionably deserves. There is not space here to discuss the disputed question as to their authorship. After a survey of the evidence on both sides, which I tried to make comprehensive,† the conclusion was reached that Graunt alone was the real author of the book. Petty probably assisted him with a medical comment here and

*The *Quantulumcunque concerning Money*, which probably belongs, as to provocation, subject, and characteristics, in a class by itself.

†See the discussion of the disputed authorship in Petty's *Writings*, i. xxxix-liv, or in *Political Science Quarterly*, xi. 105-132. In *Literature*, 11 November, 1890, p. 458, it is suggested that the varying employment of "I" and "my," "we" and "ours," in the *Observations* might have been used

there. He procured from Romsey some important figures for Graunt's use; and he may have revised or even have written the "Conclusion" of the *Observations* and their curious dedicatory epistle addressed to Sir Robert Murray, president of the Royal Society. But the chief credit of the *Observations* he must yield to his friend Graunt. Assuming, then, that the *London Observations* were written by Graunt, we may note that a fifth edition, issued in 1676, three years after his death, was prepared for the press by Petty. Petty was thus reminded of his own investigations of the Dublin bills, made shortly after the first publication of Graunt's book, and upon them and the later bills of London and Paris he soon based the eleven *Essays in Political Arithmetick* which form the third group of his writings. They are all descended, in this way, from Graunt's *Observations*; and at the beginning of the first of them Petty himself acknowledges their pater-nity. "The *Observations upon the London Bills of Mortality*," he says, "have been a new Light to the World; and the like *Observation upon those of Dublin* may serve as Snuffers to make the same Candle burn clearer." *

II.

The claim of Petty's writings to economic recognition rests upon a twofold basis: first, upon their method; second, upon their content. The method is named first, not because it is more important than the content, but because, being a statistical method, and as such inap-plicable to many subjects, it restricts to some extent the

to discriminate the portions that are by Graunt alone from those in which he had Petty's assistance. The acceptance of this test would show in many cases that parts of the same paragraph, in some cases that parts of the same sentence, had different authorship. English syntax was looser two hundred years ago than now.

* *Writings*, ii. 481.

content of the writings. This restriction, it should be borne in mind, was much more considerable in Petty's day than it would be in our own, because the masses of raw material for statistical treatment which now lie open upon every hand were at that time almost altogether wanting. Petty's predilection for a statistical method is due, I fancy, to the influence of Bacon, which was predominant among his scientific associates in the inchoate Royal Society. Like all Baconians, he believed in the usefulness of observations, and, by implication, in the uniformity of nature, and looked forward with confidence to the time when a precise knowledge of the external world should lay firm foundations for invention, and thus introduce the rule of man. Accordingly, he was unwearied in suggesting accurate physical and chemical experiments, many of which he himself assayed to perform. When, in a session of the Royal Society, some one chanced to use the words "considerably bigger," he characteristically requested that thenceforward "no word might be used but what marks either number, weight, or measure."

In the field of his particular interests he sought the same quantitative precision which, as a true Baconian, he demanded of his scientific colleagues. He had a clear notion both of the end at which he aimed and of the means by which it must be achieved. "The Method I take," he says, "is not very usual; for, instead of using only comparative and superlative Words, and intellectual Arguments, I have taken the course (as a Specimen of the Political Arithmetick I have long aimed at) to express myself in Terms of *Number, Weight, or Measure*; to use only Arguments of Sense, and to consider only such Causes, as have visible Foundations in Nature; leaving those that depend upon the mutable Minds, Opinions, Appetites and Passions of particular Men, to the Consideration of others: Really professing myself as unable to speak satisfactorily upon those Grounds (if they may be

call'd Grounds), as to foretel the cast of a Dye; to play well at Tennis, Billiards, or Bowles (without long practice,) by virtue of the most elaborate Conceptions that ever have been written *De Projectilibus & Missilibus*, or of the Angles of Incidence and Reflection."*

At many other points he returns to the idea that quantitative precision is necessary in economics as in other sciences. For example, the first chapter of the *Treatise of Ireland* contains "six points" which the author proposes to establish. In the second chapter we encounter, in twenty postulates, "the state of the case represented in terms of number, weight, and measure, and thereby made capable of demonstrations." And in the third chapter "the 6 first mention'd points are proved out of the 20 suppositions or assertions next before going." It must not be supposed that the pseudo-geometrical form of Petty's argument is either important or novel. On the contrary Roger Coke's *Treatise wherein is Demonstrated that the Church and State of England are in Equal Danger with the Trade of it* (London, 1671)—the very book against which Petty's *Political Arithmetick* was specifically directed—is more strictly Euclidian in form than anything that Petty wrote. But Coke's demonstrations rest, in every case, upon "comparative and superlative words," not upon quantitative determinations.

Judging from Petty's professions, we might expect his works to show the strictest of statistical methods. But, as has already been said, trustworthy numerical data of social interest were far more scanty at the time when Graunt and Petty began statistical investigation than they now are. No census of England had been taken. Since Domesday no complete survey or valuation of the lands had been made. Even the amounts of imports and exports were inaccurately known. Petty was unceasing in his demands for more precise information. With that end

* Preface to *Political Arithmetick*, *Writings*, i. 244.

in view he drew up a schedule for the improved registration of births, marriages, and deaths in Dublin, and tried in vain to secure royal approbation for an Irish statistical office. He saw clearly that government alone could ascertain the desired facts, and that governors would profit greatly thereby. "Until this be done," he adds, "trade will be too conjectural a work for any man to employ his thoughts about." * Meanwhile he made the best practicable use of such materials as were at hand, anatomizing Ireland with "only a commin Knife and a Clout, instead of the many more helps which such a Work requires." In one field alone was it possible to find a body of statistical data sufficiently extended and complete to warrant confidence in deductions properly made from it. For more than half a century the Company of Parish Clerks had kept weekly and annual records, in considerable detail, of births and deaths occurring in and about the city of London.† Upon these so-called "bills of mortality" Graunt had based the London *Observations* already mentioned. The most fertile field being thus pre-empted, Petty was obliged to cultivate ground whose arable spots were few and far separated. It is, indeed, surprising how slight his materials were. A few scattering bills from Dublin and Paris, hap-hazard returns of customs,—collections and the hearth tax, here and there a guess as to the area of a city, that is substantially all. Under these circumstances Petty had recourse, whenever he could not determine directly the number, weight, or measure of some fact under discussion, to that substitute for direct enumeration which distinguishes his *Political Arithmetick* from modern statistics. Statisticians enumerate: he multiplied. The value of his results varies according to the nature of the terms employed.

For example, in the absence of a census he was forced

* *Writings*, i. 53, cf. 49, 51, 104, 115, 127, 130, 180, 245; ii. 476, 485.

† The London bills of mortality are discussed historically and critically in the introduction to Petty's *Writings*, i. lxxx-xci.

to reckon the population of London, of England, and of Ireland. So far as London is concerned, he had as a basis certain facts — the number of burials and the number of houses — which bear some relation to the number of people. He then multiplied the number of burials by thirty,* satisfying himself by quoting Graunt's authority for that number. The result thus obtained he sought to confirm by multiplying the number of houses by a factor assumed to represent the average number of inhabitants to a house. This factor is sometimes six † and sometimes eight,‡ as chanced to suit his purpose. He next assumes that the population of England is eleven times that of London, or 7,369,000, because London pays one-eleventh of the assessment, and asserts that the results thus obtained "do pretty well agree" with the returns of the hearth and poll money and with "the bishops late numbering of the communicants." He does not himself give any of these figures; but it has been discovered § that, according to the accepted rules of political arithmetic, the bishops' enumeration accounted for only 82 per cent. of the number that Petty calculated. In all these cases, however, there is some real basis for his calculations; and Petty was himself under no delusions as to the accuracy of his result. Thus he says, "Although the said number of 7 millions, 369 thousand, be not (as it cannot be) a *demonstrated Truth*, yet it will serve for a good *supposition*, which is as much as we want at present." || Both the strength and the weakness of his method are abundantly exemplified in his writings. Such of his terms of number, weight, and measure as result from actual enumeration are often the basis for conclusions of value; for he had large capacity for distinguishing the essential from the incidental in any economic problem. But the obstacles in the way of enumeration were, in almost all quarters, in-

* *Writings*, ii. 332, 393.

† Vol. ii. 527, 534.

‡ Vol. ii. 459.

§ Vol. ii. 461, cf. i. p. xxxi.

|| Italics in the original.

superable even to so energetic and resourceful a man as Petty; and, while he repeatedly demanded governmental assistance in his quests, his eagerness for results too often led him to resort, in the absence of specific facts, to calculations that were nothing more than guesses. Whenever he took time to consider them, he recognized keenly enough their conjectural character. "I hope," he writes to Aubrey, "that no man takes what I say about the living and dying of men for a mathematical demonstration."* But, when the afflatus was on him, he was prone to take what he said for a mathematical demonstration himself. He did not hesitate to advance, in all seriousness, the most astounding proposals for increasing the national wealth of the three kingdoms by a wholesale deportation of the Irish and Scotch into England,—proposals based solely upon the results of a complicated series of guesses and multiplications. Still, we may not condemn him without mitigation. He was a beginner; and his mistakes in method, if not in advocacy, are not without their modern analogies. The neatness with which industrial facts can be represented by the use of mathematical terms, integral, symbolic, or graphic, carries undeniable advantages for purposes of analysis. It helps to keep ideas distinct and uniform. It throws light upon their possible permutations and combinations. But this very neatness has its dangers. The mistakes of political arithmetic may be repeated by sociological geometry and economic calculus. An investigator may fancy his problem solved when it is merely restated in a new form. The new and neater form may be a step toward eventual solution. Achieved solution it generally is not.

The influence of the statistical method, as exemplified in Graunt's *Observations* and in Petty's writings, can be traced

* "By laborious Conjectures and Calculations to deduce the number of People from the Births and Burials, may be ingenious, but very preposterous." *Observations on the Dublin Bills*, 7; *Writings*, i. 485.

in two directions. One springs primarily from Graunt, flows through Petty's *Essays*, and leads, as has already been said, to modern vital statistics: the other proceeds from Petty's *Political Arithmetick* through Davenant and Gregory King to Arthur Young and Chalmers. It has perhaps affected even Sir Robert Giffen. Parallel with it goes the development of the German *Universitäts-statistik* from Conring to Achenwall and Schlözer, whose relations to English political arithmetic have not been fully worked out. So far as I can see, the German discipline was at no time superior to the English in any respect save in the possession of the name "statistics." And Knies has forced it to yield up that.

In the field of vital statistics the connection from Graunt to Süssmilch can be traced without a break. The extent to which Petty's *Essays* depend upon Graunt has been noted already. The next link in the chain is Edmund Halley's *Estimate of the Degrees of Mortality of Mankind*, which was published in 1693 in the *Philosophical Transactions of the Royal Society*. From this paper springs modern life insurance. It cannot be doubted that Caspar Neumann materially assisted Halley by furnishing him figures for a stationary population from the Breslau bills, and it seems clear that Halley's suggestions were less esteemed in England than in Germany in the years immediately succeeding their publication.* It is nevertheless true that Halley published the first real life table, and that he mentions at the outset of his paper the prior work done upon the bills of mortality by Petty and Graunt. After Halley the next writer who acknowledges his indebtedness to them is the Rev. William Derham (1657-1735), who was also a member of the Royal Society. Derham was appointed to lecture upon the famous Boyle foundation for proving the Christian religion against atheists, deists, pagans, Jews, and Mohammedans; and, as became a scien-

* Cf. J. Grützer, *E. Halley und Caspar Neumann*, 1883.

tific clergyman of the pre-Darwinian era, he decided to demonstrate the being and attributes of God from his works of creation. While in the midst of that great argument, a chance reading of Graunt's book drew his attention to the constant relation subsisting between marriages, births, and burials. He recognized at once that this was but an admirable plan and management to keep the balance of mankind even; for, says he, "what can the maintaining throughout all ages and places of the proportions of mankind and all other creatures, this harmony in the generations of mankind, be but the work of One that ruleth the world?"* Derham's lectures in no sense constitute a statistical work; and his incidental comments on Graunt and Petty would be unimportant in the history of statistics, had not their theological setting brought them to the hands of a Prussian military chaplain named Johann Peter Süssmilch. Süssmilch himself says that *die göttliche Ordnung in den Veränderungen des menschlichen Geschlechtes* first became clear to him while he was reading Derham's book; and he thereupon sent to England for the writings of Graunt and Petty, which were mentioned by Derham, and was in large part guided by them in producing his famous work. In view of these facts it is clear that the German historians of statistics are mistaken in making Süssmilch the father of vital statistics.† The true beginnings of the science are to be found in the *Observations on the Bills of Mortality of London*. The author of that book thoroughly appreciated the importance of his work. He is the creator of statistics quite as truly as Boyle among his contemporaries is the father of chemistry, or Ray of botany, or as Newton was the originator of calculus. And it is not too much to say that no subsequent statistician has as yet modified Graunt's work so fundamentally as Lavo-

* *Physico-theology*. By W. Derham. London, 1713. I use the 1798 edition, vol. i. p. 267.

† John is far more appreciative of Graunt than the others.

sier did Boyle's, or Linnæus Ray's, or as the application of the method of limits modified the Newtonian fluxions.

If we turn to the history of political arithmetic in England, we find the influence of Petty alone as clear and decisive as was the joint influence of Petty and Graunt upon vital statistics. Davenant declared that Petty first began the application of this art to the particular objects of revenue and trade, in which he had as yet been followed by very few.* If there had been open to the industrious doctor such opportunities to examine the correspondence of Southwell, Williamson, Sir Peter Pett, Halley, and Justel as the student now enjoys, he might have been led to modify his belief that nobody but Gregory King and himself appreciated this side of Petty's activities. Yet it must be admitted that King and Davenant, working as they did under the direct influence of Petty upon the fuller data afforded by a new financial policy, brought the art to the highest pitch which it ever reached. Their followers, with the possible exception of Arthur Young, exaggerated its methodological fault of multiplying conjectural averages to secure aggregates instead of deducing the averages from aggregates directly enumerated; and when the income tax and the census of 1801 afforded more accurate estimates of national wealth and of population, political arithmetic was driven forever from its two chosen fields. It is probable, however, that the interest which it had excited and the suggestions which it had evolved contributed not a little towards making a census possible both in England and elsewhere.

III.

The content of Petty's work was more and more restricted by his method as fondness for terms of number,

* *Discourses on the Public Revenues*, 1698, in Davenant's *Works*, i, 128.

weight, and measure grew upon him. The first group of his writings, therefore, exhibits greater variety of topic than the later ones, and is far more interesting to the student of economic theory. As he passed from the field of taxation, with its fascinating speculative problems, to the descriptive and comparative pamphlets of the second period, economic digressions became fewer and fewer, and he occasionally introduced information of trifling importance for no other apparent reason than that it could be given in numerical terms. In the third group he confined himself almost exclusively to questions of population, and, except in the *Quantulumcunque concerning Money*, added practically nothing of economic interest to these earlier books. It is, therefore, in the *Treatise of Taxes* that we must look for Petty's economic ideas. No English book before Hume better deserves the attention of the economist.

Roughly speaking, Restoration finance rather confirmed than introduced fiscal innovations. Pym's (exercise) was continued in fact, if not in form, by the hereditary and temporary excises granted to the crown; and the most productive parts of the Commonwealth's customs were re-enacted, though with significant changes, by the Great Statute. On the negative side, too, the Restoration Parliament recognized what the Long Parliament had accomplished. The Court of Wards and Liveries and the royal rights of purveyance and pre-emption were not revived. But even the accustomed taxes had a new aspect now that they were no longer the exactions of "the usurper," and the addition of the poll tax and the hearth money introduced elements essentially new. Under the circumstances it is not surprising that taxes and contributions should have elicited Petty's first economic tract.

It would lead too far afield to canvass all the comments and suggestions which Petty makes upon the subject of

taxation. His general view is clear. People should pay "according to the share and interest they have in the Publick Peace; that is, according to their Estates or Riches: now there are two sorts of Riches, one actual, and the other potential. A man is actually and truly rich according to what he eateth, drinketh, weareth, or any other way really and actually enjoyeth; others are but potentially or imaginatively rich who, though they have power over much, make little use of it; these being rather Stewards and Exchangers for the other sort, than owners for themselves."* This idea underlies and shapes all his discussions of taxation. But he makes very different uses of it in the *Treatise of Taxes*, written in 1662, and in the *Verbum Sapienti*, written three years later, and he arrives at widely divergent administrative conclusions in consequence. In 1662 he saw no way of distributing the burden of taxation in proportion to the citizens' expenditures save by taxing those expenditures themselves. Accordingly he demanded, in the name of "natural justice," a heavy, if not an exclusive excise. By 1665 he had made distinct progress beyond this naïve administrative notion. Reflection upon Graunt's calculations of the number of people in England had apparently suggested to him — at any rate, he had come to see — that the whole income of the nation could be estimated from the number of the people and their expenditures. The idea proved alluring. He expanded it at once, and returned to it again and again, working it out ingeniously and gliding over its difficulties.

The income of individuals is, of course, less than their expenditure by the amount of their savings; but if that objection occurred to him at all, he probably thought that his distinction between potential and actual riches met it well enough. He therefore considered that expenditure measured income. Now income must flow either from

* *Writings*, i. 91.

property or from labor. The first step, then, is to determine the amount of expenditure; the second, to ascertain from what sources this expenditure is chiefly met. This done, taxation may be imposed, either directly upon the expenditure or upon the property which makes the expenditure possible, as administrative considerations may dictate. He assumes, accordingly, that the average of annual expenditure in England is £6 13s. 4d. per capita. No ground whatever is assigned for this assumption; and I cannot help suspecting that he reached it by guessing at a total annual expenditure of 40 million pounds and dividing that sum among an assumed population of 6 million people.* However that may be, he established to his own satisfaction that the people of England spend 40 million pounds per annum, and are really and actually rich in proportion. He next inquires in what their wealth consists. The lands, houses, cattle, goods, ships, and money of the country are separately valued, giving a total of 250 millions, which is supposed to yield its possessors 6 per cent.; or 15 millions yearly, out of the 40 millions which the community spends. The remaining 25 millions must be due to labor. Now the people who perform this labor are as valuable as would be the fee of lands renting for what they earn; "for, although the Individiums of Mankind be reckoned at about 8 years' purchase, the Species of them is worth as many as Land, being in its nature as perpetual, for ought we know."† The people are therefore worth 416½ millions as against 250 millions for "the stock of the kingdom."‡

* Graunt had calculated the population of England in 1662 at 6,440,000. In 1687 Petty thought it to be 7,369,000, as previously noted. See p. 317. In the *Political Arithmetick* Petty returned to the question of average expenditure, and then (1676) gave some reasons for thinking that £7 per annum "may well enough stand for the Standard of Expense of the whole mass of Mankind" in England. *Writings*, i. 306.

† *Writings*, i. 108.

‡ Cf. *Political Arithmetick*, 31, 32; *Writings*, i. 267. This ingenious calculation has been brought down to date by Professor J. S. Nicholson, "The Living Capital of the United Kingdom," in *Economic Journal*, i. 95 (1891).

This enables him to substitute for the exclusive excise which he formerly advocated a system of taxes whereby five-eighths of the amount required shall be levied upon the people and three-eighths upon the stock, land paying 21 per cent. of the whole, personal estates 6 per cent., and so on, in proportion to their several values. When this is done, no man will pay more than he ought or need, "which disproportion is the true and proper Grievance of taxes."

Whether we regard this as a formulation of the problem of justice in taxation or as an attempt at the comprehensive solution of that problem, it is entitled to high praise. Not before Adam Smith, perhaps, can another discussion of the subject be found so thorough and so well balanced as is Petty's.*

Out of his discussion of taxes proceeds his treatment of rent, the "mysterious nature" of which he thinks it well to explain before talking too much about its taxation. There have been intimations that Petty held a "correct" theory of rent.† It is well, therefore, to see just what his theory is. It is, first of all, a theory of agricultural rent. Accordingly, he distinguishes between "the natural and genuine Rent of Lands" ‡ and their rent in gold or silver, between the "corn rent" and "money rent." The corn rent of agricultural lands, he says, is determined by the excess of their produce over the expenses of their cultiva-

* Certainly nothing to compare with it has been discovered by the researches of F. J. Neumann ("Die Steuer nach der Steuerfähigkeit," in Conrad's *Jahrbücher* (1880), xxxv. 511-578), Robert Meyer (*Die gerechte Besteuerung* (1884), 3-21), Hasbach ("Die Entwicklung der Finanzwissenschaft bis auf Adam Smith," in his *Untersuchungen über Adam Smith* (1891), 240-290), or Rioca-Salerno (*Storia delle dottrine finanziarie* (1896), 148-210).

† E.g., McCulloch's *Literature of Political Economy*, s. v., Ingram's *History of Political Economy*, p. 57. Dr. Bevan goes so far as to say (*Sir William Petty: A Study*, 98) that Petty "would quite agree with Ricardo's definition of rent as the payment for indestructible powers of the soil"!

‡ *Political Anatomy of Ireland*, 54; *Writings*, i. 174.

tion, those expenses being paid in corn. And the value of this excess, or the money rent, is measured by the amount of silver that a man working a free mine for the same period as the cultivator of the corn land will have left after meeting his expenses with a portion of the silver that he has secured.*

Passing over, for the moment, Petty's use of the labor theory of value to explain the equivalence of corn and money rents, let us turn attention to his account of the origin of corn rent. As quoted in the foot-note, it sounds rather imposing and even somewhat Ricardian. But upon examination it is seen to be merely a graphic way of saying that the rent of a farm must be paid out of the excess of its crops over the cost of producing them. That is all the Ricardianism there is in it. If Petty had been, as he was not, the first to make this assertion,† his priority would have been due solely to his predecessors' contempt for commonplace. Merely to note that there must be a surplus before rent can be paid, advances the discussion no whit beyond the experience of every man

*"Suppose a man could with his own hands plant a certain scope of Land with Corn, that is, could Digg, or Plough, Harrow, Weed, Reap, Carry home, Thresh and Winnow so much as the Husbandry of this Land requires; and had withal Seed wherewith to sow the same. I say, that when this man hath subducted his seed out of the proceed of his Harvest, and also, what he himself hath both eaten and given to others in exchange for clothes, and other Natural necessities; that the remainder of corn is the natural and true Rent of the Land for that year; and the medium of seven years, or rather of so many years as makes up the Cycle, within which Dearth and Plenties make their revolutions, doth give the ordinary Rent of the Land in corn.

"But a further, though collateral question may be, how much English money this Corn or Rent is worth? I answer, so much as the money which another single man can save within the same time, over and above his expence, if he employed himself wholly to produce and make it; viz., Let another man go travel into a Country where there is Silver, there Dig it, Refine it, bring it to the same place where the other man planted his Corn, Coyne it, &c. the same person, all the while of his working for Silver, gathering also food for his necessary livelihood, and procuring himself covering &c. I say the Silver of the one must be esteemed of equal value with the Corn of the other." *Treatise of Taxes*, 24-25; *Writings*, i. 43.

† See, for example, Hales' *Discourse*, 38.

who has contracted to pay rent. Granted the surplus, nothing is plainer than that the cultivator would retain it if he could. "It is," as Ricardo remarks, "one thing to be able to bear a high rent, and another thing actually to pay it."* What needs to be explained is not how the cultivator can pay rent, but why he must. Adam Smith observed that, "as soon as the land becomes private property, the landlord demands a share of almost all the produce." But he did not explain why the cultivator accedes to this unwelcome demand, and his explanation of rent was incomplete in consequence. The so-called Ricardian theory of rent supplies this gap by means of the Law of Diminishing Returns. Any theory which does not contain this is something less than Ricardian.

There was probably nothing to suggest diminishing returns to Petty. Mr. Cannan has shown† how the notion that additional supplies of food must be secured at increased cost was a natural conclusion from the conditions that preceded and indeed evoked Malthus's *Inquiry into the Nature and Progress of Rent*. In Petty's time, circumstances were quite otherwise. The year in which he wrote, to be sure, was a time of dearth approaching famine.‡ But no such extreme and continued rise of prices as occurred between 1790 and 1815 had taken place within his recollection. Moreover, his warm friend, Hartlib, had published a book professing to show that by the use of agricultural methods prevailing in Brabant and Flanders all sorts of crops might be enormously increased in England.§ Petty was by temperament inclined to experiment and to improve. He probably knew, as every

* Chapter on "Mr. Malthus's Opinions on Rent" in Ricardo's *Principles*, p. 559 of 1817 edition.

† "The Origin of the Law of Diminishing Returns," in *Economic Journal*, March, 1892, ii. 53-69, also in his *Theories of Production and Distribution* (1894), 147-168.

‡ Rogers's *History of Agriculture and Prices*, v. 213-215.

§ *Legacie of Husbandry*, 1656.

land-owner must, that it "don't pay" to spend more than a limited amount per acre on a barley field. But he never looked upon society, as Ricardo was prone to do, as a clock destined to run down by the exhaustion of its stored-up force.* If he wanted to use more money to advantage on his patch, he would have tried "Flax, Turnips, Clover grass, Madder, etc.," "so as to advance in value from one to an Hundred," as Hartlib advised.† He doubtless believed,‡ just as Hume§ did, that with social progress a smaller portion of the community would suffice to raise food for the whole. This faith, which has been hitherto abundantly justified by the facts, is, of course, not logically incompatible with that form of the law of diminishing returns which is necessary to explain Ricardian rent.|| But a man who has such faith is unlikely to hit upon the Ricardian formulation of the law. And Petty did not.

The device which played in Petty's theory of rent the place taken by diminishing returns in Ricardo's is clearly indicated in his calculation of the rent of the counties nearest London. "We would first at hazzard compute the materials for food and covering, which the Shires of Essex, Kent, Surrey, Middlesex and Hertford, next circumjacent to London, did *communibus annis* produce; and would withal compute the Consumptioners of them living in the said five Shires and London. The which if I found to be more than there were Consumptioners living upon the like scope of other Land, or rather upon so much other Land as bore the like quantity of Provisions, then I say that Provisions must be dearer in the

* I cannot recall whether this comparison was suggested by Mr. Cannan or by Dr. Patten.

† *Political Arithmetick*, 2, 4; *Writings*, i. 249-251.

‡ *Ibid.*, 33; *loc. cit.*, 267.

§ "Essay of Commerce," *Philosophical Works* (1854), iii. 280.

|| Cf. Commons, *Distribution of Wealth*, 116-159; Clark in Palgrave's *Dictionary*, i. 602 a.

said five Shires than in the other; and within the said Shires cheaper or dearer as the way to London was more or less long, or rather more or less chargeable. For if the said five Shires did really produce as much Commodity as by all endeavour was possible; then what is wanting must be brought from afar, and that which is near advanced in price accordingly; or if the said Shires by greater labour than now is used . . . could be fertilized, then will the Rent be as much more advanced as the excess of encrease exceeds that of labour."* The hint here given, that the rent of lands depends not upon their differing technical fertility, but upon their proximity to markets, is subsequently developed into one of the mathematical formulæ whose definiteness appealed so strongly to Petty's mind. "Land of the same quantity and quality in England," he says, "is generally worth four or five times as much as in Ireland, and but one-quarter or one-third what it is worth in Holland, because England is four or five times better peopled than Ireland, and but a quarter as well as Holland."†

Bearing in mind that, according to Petty's view of the matter,—a view shared by seventeenth century economists generally,—rent is a criterion of prosperity and its rise the surest sign of growing wealth, we can see how his theory that high rents were directly due to dense population explains his advocacy of wholesale schemes of "transplantation" in order to increase the wealth and power of the State. Thus, protesting that the suggestion is but "a

* *Treatise of Taxes*, 33; *Writings*, i. 51, 52. In another part of the same tract (p. 30; *Writings*, i. 48, 49) he says: "If the Corn which feedeth London or an Army be brought forty miles thither, then the Corn growing within a mile of London, or the quarters of such Army, shall have added unto its natural price, so much as the charge of bringing it thirty-nine miles doth amount unto. . . . Hence it comes to pass that Lands intrinsically alike near populous places, such as where the perimeter of the Area that feeds them is great, will not only yield more Rent for these Reasons, but also more years purchase than in remote places, by reason of the pleasure and honour extraordinary of having lands there; for *Omne tulit punctum qui miscuit utile dulci*."

† *Political Arithmetick*, 67; *Writings*, i. 286.

jocular and perhaps ridiculous digression, which I desire men to look upon rather as a Dream or Resvery than a rational proposition," he calculates in the *Political Arithmetick* that, if the people of Ireland and the Highlands of Scotland were all transplanted to England, the resultant rise in rents and in year's purchase would so enrich that kingdom that it could afford to buy the lands and fixtures of its neighbors and to pay the expense of importing their persons and movables. The same idea he elaborated in great detail in the *Treatise of Ireland*, and he seriously attempted to secure for it the approbation of James II. As a practical proposal, it is preposterous; and the king of course refused to entertain it. But we must consider the circumstances. In the first place, Petty was familiar from his Irish experiences with the idea of deporting a whole population. He doubtless argued that, if a usurper for a mere political reason might transplant all the Irish beyond the Shannon, surely a true king might remove them to England, where, after all, they would be better off than in Connaught, while at the same time they would make his the richest kingdom in Europe. The seventeenth century was less careful of the individual's rights than the nineteenth. In the second place the economics of Petty's proposal are altogether sound. People are wealth. They are, indeed, the chief component of the national capital. The people of Ireland are capital badly situated. Their efficiency will be increased by transplanting them, just as the efficiency of a factory might be by removing it to a better site. The idea is inconsiderate; but, granting Petty's premises, it is by no means absurd.

Petty's theory of value, like his theory of rent, is developed incidentally to the discussion of taxation. It is an uncompromising quantity-of-labor theory. "Let a hundred men work ten years upon Corn, and the same num-

ber of men, the same time, upon Silver; I say that the neat proceed of the silver is the price of the whole neat proceed of the Corn, and like parts of one the price of like parts of the other. . . And this also is the way of pitching the true proportion between the values of Gold and Silver, which many times is set but by popular error. . . This I say to be the foundation of equallizing and ballancing of values; yet in the superstructures and practices hereupon, I confess there is much variety and intricacy; of which hereafter." * The promise in these last words is kept by numerous incidental remarks scattered throughout his writings, pointing out how the superstructure differs from what the foundation would lead us to expect, or, in modern language which scarcely misrepresents Petty's idea, how market price differs from the normal price of his theory. He says, for example, that "forasmuch as almost all Commodities have their Substitutes or Succedanea, and that almost all uses may be answered several wayes; and for that novelty, surprize, example of Superiours, and opinion of unexaminable defects do adde or take away from the price of things, we must adde these contingent Causes to the permanent Causes abovementioned, in the judicious foresight and computation whereof lies the excellency of a Merchant." † Compared with anything that preceded it in England, ‡ this analysis marks a great theoretical progress. It cuts loose altogether from the mediæval notion, current at least as late as Hales' *Discourse of the Common Weal*, § that price is arbitrarily determined by the seller, whose exactions must be persistently checked by law. It at least suggests the difference between normal and market price. It clearly enunciates the theory of normal price that dominated economic

* *Writings*, i. 43, 44, *Treatise of Taxes*. † *Writings*, i. 90, *Treatise of Taxes*.

‡ I have only a second-hand acquaintance with the early Italian theories of value, based on Graziani's *Storia critica della teoria del valore in Italia* (1889).

§ Lamond's edition, 42, 43.

thought for more than two hundred years, and bids fair to occupy once more the superior, if no longer the only, seat upon the throne. By combining it as a theory of natural price with Locke's supply-and-demand explanation of value as a theory of market price, it became possible to construct, as, perhaps, without conscious dependence upon Petty, or even upon Locke, Adam Smith did eventually construct, a theory of value so satisfactory that, when amended in some minor prints, John Stuart Mill could pronounce it "complete." Of course, it was not as complete as Mill thought it; but the contribution of its characteristic element is no mean achievement.

IV.

The second group of Petty's pamphlets, comprising the *Political Anatomy of Ireland* (1672) and the *Political Arithmetick* (1676), is predominantly descriptive. As might be expected from the specific circumstances which gave rise to the *Political Anatomy of Ireland*, its chief value springs from its author's unrivalled acquaintance with the condition of that island during the quarter-century after the Cromwellian settlement. Undeniably, the book has its blemishes. It contains some of the least admissible of Petty's calculations. It is not without numerical trivialities. But, on the whole, its merit is high. Economically, however, it merely repeats the suggestions of the earlier pamphlets, adding little or nothing new to Petty's known ideas. The *Political Arithmetick* deals chiefly with England. It, too, is in a sense descriptive. But detailed description is here consistently subordinated to a political purpose. The book is Petty's comment upon the rivalry between England and the continental nations for commercial control of the world. Of that great conflict it was his peculiar merit to take a large view. He

recognized with a clearness of vision unparalleled in his time that the contest was already world-wide, and that the whole strength of Britain must be called into play. He was accordingly the first to propose the legislative union of Ireland with England,* and also the earliest of imperial unionists. He saw, too, that the struggle was not a matter for one parliament or one reign. Various opponents had succeeded one another upon the continental side of the board,—Portugal, Spain, the Netherlands. Who should close the contest he could no more foresee than we can decide to-day whether the last player against Britain shall be Russia or America. But his prescience of the immediate future was extraordinary. Earlier than any of his contemporaries† he discerned that the day of the Netherlands was passed. His thesis, supported with increasing vigor from the *Treatise of Taxes*, in 1662, to the *Five Essays*, written a quarter of a century later, is that England must find her rival for the trade of the world to the south, no longer to the north, of the Scheldt. And in a contest with France, as he never tires of showing, England has all the natural advantages necessary to ultimate success.

The argument of the *Political Arithmetick* might almost be condensed, though at some risk of misrepresenting the author's temper, into the words of a not unknown verse,—

"We don't want to fight; but, by jingo, if we do,
We've got the ships, we've got the men, we've got the money, too."

* *Writings*, i. 159-161, 219-221 (*Political Anatomy*), 298-301 (*Political Arithmetick*). Cf., T. D. Ingram's *History of the Legislative Union*, 11, ff.; Ball's *Historical Review of the Legislative Systems in Ireland*, 72. The *Political Anatomy* was written five years before [Thomas Sheridan's] *Discourse of the Rise and Power of Parliaments*, and was published seven years before Molyneux's *Case of Ireland being Bound*.

† The much-experienced Sir William Temple might appear to be an exception. Temple's *Observations upon the United Provinces*, published in 1673, does indeed contain a chapter on "The Causes of their Fall in 1672." But Temple was impressed merely by the disasters of the Dutch at the beginning of that

"That the People and Territories of the King of England are naturally near* as considerable for Wealth and Strength as those of France," that England can "maintain a hundred thousand Foot, thirty thousand horse, and forty thousand men at sea," that there is in England "Money sufficient to drive the Trade of the Nation," and "Stock competent and convenient to drive the Trade of the whole Commercial World,"—such are the propositions to whose demonstration Petty addresses himself. His line of argument is ingenious. He first proves, by the example of Holland, that a small country and few people may, by their situation, trade, and policy, be equivalent in wealth and strength to a far greater people and territory. Examination of the geographical situation leads him to the conclusion that conveniences for shipping and water carriage do most eminently and fundamentally conduce thereunto; and he points out very shrewdly how the inferiority of France in ports, and consequently in seafaring people, constitutes a real and natural impediment to her power. Meanwhile on land the conditions are not so unequal as they seem. To be sure, "the King of England hath about Ten Million of Subjects, *ubivis Terrarum Orbis*, and the King of France about Thirteen and $\frac{1}{2}$."† But, "Although it be very material to know the number of Subjects belonging to each Prince, yet when the Question is concerning their Wealth and Strength, It is also material to examine how many of them do get more than they spend and how many less."

shameful war, and the causes that he assigns are chiefly that military unpreparedness and that lack of united martial spirit which the event showed to be less than he supposed. Of the underlying and more permanent reasons why Holland must give way to France, and France to England, Temple showed little comprehension.

* "Near" was, as the British Museum MS. of the *Political Arithmetick* shows, a concession to caution. It did not appear in the fair copy made by an amanuensis, but was afterwards inserted by Petty's hand. See *Writings*, i. 284.

† *Political Arithmetick*, 76, 77; *Writings*, i. 291.

This introduces a new element into the calculation of "the value of people" as we met it in the *Treatise* and in *Verbum Sapienti*. Some individuals are not "superlucrators," and must be excluded. For example, there are twenty thousand churchmen in England, and over two hundred and seventy thousand in France. This quarter of a million of supernumerary clergymen, withdrawn out of the world, are adult and able-bodied persons, and consequently "equivalent to about double the same number of the promiscuous Mass of Mankind; . . . wherefore the said Two Hundred and Fifty Thousand Churchmen (living as they do) makes the King of France's Thirteen Millions and a half to be less than Thirteen."* He then shows further that the King of England has forty thousand seamen, and the King of France ten thousand. "But one seaman earneth as much as three common Husbandmen; wherefore this difference in seamen addeth to the account of the King of England's Subjects an advantage equivalent to Sixty Thousand Husbandmen." Similarly, the superiority of England in artisans employed upon shipping of all sorts, who likewise earn three times as much per capita as husbandmen, adds the equivalent of eighty thousand husbandmen more. Still further, the King of England's territories are, because of their coast line and deep rivers, "in effect but 12 miles from Navigable Water, the King of France's 65, . . . upon which grounds it is clear that England can be supplied with all gross and bulky commodities of Foreign growth and Manufacture at far cheaper rates than France can be, namely, at about 4s. per cent. cheaper, the Land carriage . . . being so much or thereabouts."† This cannot amount to less than the labor of one million people. Thus the effective population of France is reduced from 18½ to 12 millions.

* This argument quite harmonizes with Petty's highly-developed theory of productive and unproductive labor.

† Petty had conducted elaborate experiments to determine the cost of land carriage with different vehicles.

Here the argument takes a new and concluding turn: "Lastly, I offer to the consideration of all those, who have travelled through England and France; whether the Plebians of England (for they constitute the bulk of any Nation) do not spend a sixth part more than the Plebians of France? And if so, it is necessary that they must first get it; and consequently that Ten Millions of the King of England's subjects, are equivalent to Twelve of the King of France; and upon the whole matter, to Thirteen Millions, at which the French Nation was estimated."

It is not necessary to pursue the contentions of the *Political Arithmetick* further, in order to see that the impediments of the greatness of France, such as paucity of ports, are natural and perpetual, while the impediments of England's greatness, being political, are but contingent and removable. Nor shall I follow him here into the interesting discussion of the amount of money that the nation has and the amount that it needs. Enough has been brought forward to show both the extent to which Petty pushed his calculations of "the value of people," and his high estimate of their relative importance in that "Par or Equation between Lands and Labor" which he regarded as "the most important Consideration in Political Economies."*

The *Essays in Political Arithmetick*, together with the *Quantulumcunque*, form the third group of Petty's writings. They are almost altogether taken up with attempts to calculate the population of various cities. Like the *Political Arithmetick* itself, they have a public purpose.

* *Writings*, i. 181; *Political Anatomy of Ireland*, chap. ix. This is, no doubt, the passage which Cantillon found "dans un petit Manuscrit de l'année 1685 [1672]" by Petty. But we may not conclude that Cantillon's eleventh chapter, or indeed any part of his argument, was consciously influenced by Petty's remarks, for he declares that "la recherche qu'il en a fait, en passant, n'est bizarre & éloignée des règles de la nature, que parcequ'il ne s'est pas attaché aux causes & aux principes, mais seulement aux effets." *Essai sur le Commerce*, p. 54.

They explain to James II., who, at least in Petty's fancy, was willing, if only he could afford it, to cut loose from the dependence upon France inaugurated by his brother, that his own capital of London was a greater city than Paris, and, indeed, the greatest in the world. From this demonstration it is clear that Petty expected great results. In fact, their influence upon the royal conduct was too slight to be detected. They attracted some attention of the curious,* but they failed altogether of the purpose which their author had at heart.

The present interest of the *Essays* lies chiefly in the light which they throw upon Petty's statistical method. Economically, they are barren. The *Quantulumcunque*, on the other hand, is full of meat. This little tract of eight pages is one of the least known of Petty's writings, for it was never included in the collected editions of the *Essays*; and the reprints of it † are nearly, if not quite, as scarce as the original. It takes the form of a dialogue, thirty-two questions being asked and answered about the coinage of England. It was written in August or September, 1682, when Halifax, always before his contemporaries in appreciating public needs, was already planning for the recoinage that was not carried out until 1696; and it is addressed to that far-sighted statesman. It begins by arguing that the clipped money should be recoined at full weight of the old standard, but at the cost of the holders, not of the State. If it were recoined at public cost, "men would clip their own Money; But the Owner himself must bear the loss, because he might have refused light and defective Money." The argument that recoinage at full weight will increase the export of coin to the damage of England

* See *Journal des sçavans*, 15 Mars, 1683, Bayle's *Nouvelles de la république des lettres*, October, 1686, and the Leipzig *Acta Eruditorum*, October, 1687.

† In Massie's *Observations relating to the Coin*, 1760, and in *A Select Collection of Scarce and Valuable Tracts on Money from the Originals of Vaughan, Cotton, Petty, Lowndes, Newton, Prior, Harris, and Others. With a preface (by J. E. McCulloch), notes, and index.* London: Printed for the Political Economy Club, 1856.

is met by showing, first, that silver is exported as bullion, the number of coins to the ounce being immaterial, and, secondly, that money is exported only when the merchant can get for it abroad goods of greater value. Full weight coinage, therefore, is alone advisable; and those States that have debased their coin "are like Bankrupt Merchants, who Compound for their Debts by paying 16s. 12s. or 10s. in the pound." Interest is "a Reward for forbearing the use of your own Money for a Term of Time agreed upon, whatever need yourself may have of it in the meanwhile"; and laws limiting interest are as ill-judged as those limiting the exportation of money or the rate of exchange, "for Interest always carrieth with it an Ensurance praemium which is very casual, besides that of Forbearance." These extracts will show the quality of the pamphlet, whose published price was twopence. It was worth the money.

V.

The notion is more or less prevalent that, in his general attitude towards industrial society, Petty was somehow a forerunner of Adam Smith, a "founder of political economy." What "political economy" may mean in this connection is not altogether clear; but it is, at any rate, something which an intelligent man may be expected to "know," and it appears to culminate in the dogmatic preaching of free trade. Tried by the free-trade shibboleth, Petty has been found to merit a condescending approval. "He is one of the first in whom we find a tendency to a view of industrial phenomena which was at variance with the then dominant mercantilistic ideas." He was "generally opposed to government interference with the course of industry," and contributed in his way, as did Dudley North's "most thorough-going and emphatic assertion of the free-trade doctrine against the system of

prohibitions," to lay "the foundations of a new and more rational doctrine than that of the mercantilists."* Such views of Petty are due, I think, rather to the influence of Roscher † than to an exhaustive examination of Petty's writings. Travers Twiss, who reviewed the development of economics only four years before Roscher, and was properly anxious to commend his countrymen by showing that they had cherished the enlightened views of Smith and Ricardo a century or more in advance, mentions Petty's writings three times; ‡ but even with the help of McCulloch he finds in them no such "able statement of the true principles of commerce" as North's *Discourses upon Trade* contained. § Roscher, therefore, may be credited with originating, and Kautz || with promptly adopting, the idea that Petty, North, and Locke constituted a sort of free-trade triumvirate. The grouping seem to me of doubtful propriety.

Petty is a copious and vivacious writer, abounding in comment and digression. He is primarily interested in taxation, not in trade,—a sort of an English cameralist. When he does turn his attention to trade, we find that he has progressed far enough beyond the cruder expedients of mercantilism to condemn restrictions on the export of coin, ¶ and even to suggest that a nation may have too much money; "for Money is but the Fat of the Body politick, whereof too much doth as often hinder its Agility as too

* J. K. Ingram on Petty, *Encyclopædia Britannica*, xix. 358 (1885); also, Ingram's *History of Political Economy*, 47–53, reprinted from *Encyclopædia Britannica*.

† Zur Geschichte der englischen Volkswirtschaftslehre im 16. und 17. Jahrhundert, Leipzig, 1851, in *Abhandlungen der k. sächs. Gesellschaft der Wissenschaften*, 3er Bd.

‡ *View of the Progress of Political Economy since the Sixteenth Century* (1847) pp. 64, 57, 101.

§ *Ibid.*, 83.

|| *Die geschichtliche Entwicklung der Nationalökonomie* (1860), § 46: "Die anti-mercantilistische Richtung und die Anfänge der wissenschaftlicheren Nationalökonomie in England," pp. 308–317.

¶ *Writings*, i. 57, 58, 87; ii. 440, 445, 446.

little makes it sick."† At times he goes further still in his dissent from current views, and it is quite possible to cull from his pamphlets scattered passages that appear to support Roscher's classification.‡ There are, for example, several remarks about the Laws of Nature§ which read almost as if he shared that belief in a pre-established harmony of interests which, in the case of Adam Smith, reduced the free-trade proposition to the rank of a mere corollary. But it would be a mistake to consider such passing remarks as indices of Petty's true position. Not only can each specific condemnation of some restriction upon trade be offset by a specific commendation of some other restriction, but, what is far more important, it is clear also that to represent Petty as an advocate of *laissez-faire* on principle is altogether to misrepresent him. On the contrary, he not only assumed, like the political disciple of Hobbes that he was, that the government is justified in doing anything whereby the national wealth will be increased, but he was unwearying in devising schemes, sometimes legislative, sometimes administrative, for that end. Some of his schemes are little short of fantastic.|| Many of them evince an entire disregard for the wishes and interests of individuals. In short, if we understand mercantilism to consist, broadly speaking, in a tendency to force the transition from local to national economic coherence by means of governmental interference with the activities of individuals in business, then Petty was one of the most extreme among English mercantilists.

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† Vol. ii. 113.

‡ Cf. especially chap. vi. of the *Treatise of Taxes*; *Writings*, i. 54-61.

§ Vol. i. 9, 48, 243; ii. 445; cf. i. 60.

|| E.g., the plan to reduce Ireland to a cattle ranch by deporting three-fourths of the Irish to England. *Treatise of Ireland*, *Writings*, ii. 545-621.

PUBLIC EMPLOYMENT OFFICES IN THE UNITED STATES AND GERMANY.

THE movement for the establishment of free public employment offices is of recent development; but it has already spread through eight or nine States in this country, has proceeded still further in France and England, and in Germany bids fair to displace altogether the private employment agencies. It is one phase of the general humanitarian movement, which has as its motive the welfare of the laboring classes, and of which factory legislation, tenement-house acts, a shorter working-day, and the like are the various manifestations. This spirit, at least, has made the establishment of such offices possible. In the United States the immediate motives leading to their establishment seem in some cases not to have been of such a high order. Here they have either been established as a protest against the abuses which grew up under the system of private intelligence offices, which had not been subjected to effective supervision on the part of the State or by the cities wherein they existed,* or they have been championed for purely political reasons, in order to win or conciliate the labor vote.†

The purpose underlying the movement needs but a word of explanation. The agencies are designed to bring employers and unemployed into communication with one another, and by a complete oversight over the labor market to secure the best possible adjustment of supply and demand at any given time. Though necessarily meeting local needs for the most part, their ideal is so to extend the sphere of their operations—in conjunction, it

* *E.g.*, Ohio and Illinois.

† *E.g.*, Montana and Nebraska, probably also New York.

may be, with other offices—that they can obtain the desired labor force from those districts where it is in excess and send it to those places where it is needed. To secure such results would call for the heartiest possible co-operation of employers and working people, almost universal resort to the employment bureau as the agency to effect the adjustment of the labor market, and, finally, a wide field of operations. While hardly one of these conditions has been met in the United States, the offices established show vitality and encouraging growth. Manifestly, however, such offices cannot initiate employment; and those who expect that through them work is to be obtained for the unemployed by mere registration will inevitably be disappointed.

The plan of free intelligence offices, or offices maintained under State control for the registration of persons desiring employment, finds its fullest expression in France.* There the establishment of such offices seems to have resulted from the methods of dealing with persons out of employment which were adopted after the abolition of the feudal system, and which have finally developed into the institutions now existing. The first practical plan for organizing *bourses du travail* appeared in 1848, when the Provisional Government established a free information bureau in each of the *mairies* of Paris. Though unsuccessful at the time, the plan was revived in 1886; and several municipalities established free registry offices, chiefly as a protest against the evils of the private offices. Notwithstanding the establishment of these municipal registries, however, and the work of the trade unions, the licensed employment offices still remain the most extensive agencies in France for placing unemployed work-people.

In England the first office of this kind was opened at

* *Le Placement des Employés, Ouvriers, et Domestiques en France*. Published by the Office du Travail.

Egham in 1885.* The bureau is managed by the local superintendent of births, deaths, and marriages, who adds this to his other duties. A dozen similar offices have been established in other cities and towns throughout Great Britain. Switzerland was the next country to follow suit, with the establishment of a free employment bureau in Berne in 1888 and of one in Basle the year following.† In Germany free agencies for the purpose of securing work for the unemployed have existed for a considerable time, either of a charitable nature or in connection with the institutions for the suppression of vagrancy.‡ The first free public employment office, in the sense in which we shall use the term, was established in Freiburg in 1892. For the United States, Ohio has the honor of having established the first free public agency, in 1890,—an example which was not imitated until 1895 by any other State.

I. THE UNITED STATES.

From the recentness of the movement for the establishment of these offices, it is evident that other attempts must have been made to secure the registration of the unemployed and the equilibration of the labor market. The most important of these agencies in the United States are the private intelligence offices; and it is to a consideration of these that we must, therefore, first address ourselves before we can fully understand either the need of or the demand for offices conducted under the control of the State.

Private employment agencies exist in almost every city of the Union, but no systematic canvass has ever been attempted to ascertain their number or the extent of their

* *Agencies and Methods for Dealing with the Unemployed*. Published by the Labor Department of the English Board of Trade, 1893.

† R. Calwer, *Arbeitsmarkt und Arbeitsnachweis*, Stuttgart, 1899, p. 32.

‡ *Special Consular Reports: Vagrancy and Public Charities in Foreign Countries*, Washington, 1893, p. 292 et seq.

business. However, from some scattered data in the reports of several of the State bureaus of labor statistics, it has been possible to compile a few figures which are of interest, and may be considered typical of all. These show the number of private agencies in a few cities, and the number of applicants and the estimated receipts; but none of these statistics can be considered accurate, many of the returns being confessedly only estimates. In Boston there were 119 private employment agencies in 1893, and reports from 87 of them showed 600,934 applicants for employment, of whom 128,912, or 21.45 per cent., secured positions. At the minimum charge of 50 cents apiece, this would yield the offices over \$300,000 a year.* Commissioner Hall gives figures for St. Louis and Kansas City, which, he thinks, represent about 40 per cent. of the business done in these two cities. In St. Louis there were 6,032 applications for employment in seven women's agencies, and 5,626 positions secured. The admitted receipts, which Mr. Hall thinks about half of what was in fact received, were \$3,198. Six other agencies found work for 20,800 out of 106,600 applicants. Their receipts are estimated at \$100,000. The Kansas City agencies were only a little behind this, as the following figures show:—

<i>No. Agencies.</i>	<i>No. Applications.</i>	<i>Positions Filled.</i>	<i>Receipts from Fees.</i>
8 (for men)	64,740	43,672	\$64,464
4 (for women)	22,711	3,835	6,103

Commissioner Hall estimates that the \$70,567 admitted receipts were less than one-half the amount actually taken in.†

There were 119 licensed agencies in Chicago in 1896, at which it is estimated that not less than 1,000,000 persons applied for employment during the year. At the minimum

* *Twenty-fourth Annual Report of Massachusetts Bureau of Statistics of Labor*, 1893, p. 111.

† *Fourteenth Annual Report of the Bureau of Labor Statistics and Inspection of Missouri*, 1892.

charge of \$1 apiece this would give an annual income of \$1,000,000.* In California 69 well-equipped private employment agencies are reported to exist, whose cost of maintenance alone is estimated at \$206,700 a year.† Twenty-one private agencies are reported from Colorado, most of them being situated in Denver.

Inadequate as these figures are, they yet serve in some degree to show the extent of the business done by the employment agencies of the country, and give an idea of the vast sums that are paid annually by the unemployed for the purpose of securing employment. That these agencies meet a real want seems not open to doubt. But the further question as to how well they fill it and with what advantage to the unemployed is not so certainly to be answered in their favor. In fact, one of the strongest arguments in favor of the establishment of free public employment offices rests on the abuses which exist in the private agencies. This point is made much of by the commissioners of labor in the various States, and their reports contain many instances of the deception and fraud practised by these agencies on the unemployed. While they are naturally interested in making out as strong a case as possible against the "pay" agencies, and though a large number of these are of the highest possible character, there is still without doubt a large class which merely preys on the unemployed and takes advantage of their need.

The least of the abuses which are perpetrated is the universal practice of accepting a fee, whether there is prospect of finding a position or not, and of refusing to refund it when a position is not secured.‡ No pay agency

* *Tenth Biennial Report of the Bureau of Labor Statistics of Illinois, 1898, p. 133.*

† *Seventh Biennial Report of the Bureau of Labor Statistics of California, 1895-96, p. 52.*

‡ The laws of a number of States require that the fee be refunded, if employment is not secured. See Table, p. 348.

will ever admit that the labor market is overstocked.* Worse than this is the practice of advertising for laborers to undertake work in distant cities, and of sending them to fill purely fictitious openings after accepting their fees.† In the case of some of the more dishonest agencies there is an agreement between a foreman and an agency, according to which men sent by the agency are employed, but only for a few days, and then discharged to make way for others. The fees are divided between the agent and the foreman.‡ An additional refinement, which is reported from New York, consists in an illicit connection of employment agencies with alleged employers, who refer an applicant to a guarantee agency, which is also in the league, and which exacts another fee for looking up the references.§ It is a not uncommon plan to have the employment agency located in the rear of a dram-shop, which the men, who are purposely kept waiting in the hope of securing a position, will unfailingly patronize.

Many of the abuses complained of here are largely the result of inadequate supervision and control of the agencies in their dealings with an ignorant and needy class of persons, easily victimized and slow to seek redress. To regulate these evils of the private employment offices, a few of the States have therefore required them to pay licenses or give bonds, or both. Colorado, Illinois, Maine, Minnesota, Pennsylvania, and Washington compel all employment offices to pay an annual license fee, ranging from \$1 in Maine to \$200 in Illinois. In Louisiana and the cities of New York and Brooklyn a license must be obtained in order to do business; but no payment is required.|| Five of the States — Colorado, Illinois, Loui-

* "Fraudulent Advertisement of Lucrative Employment," by P. G. Hubert, Jr., *Lippincott's Magazine*, vol. liv. p. 657.

† *Illinois Report*, 1898, p. 133.

‡ *California Report*, 1896, p. 56.

§ *Bulletin of the Bureau of Labor Statistics*, December, 1899, p. 155.

|| A bill of this sort is now before the New York legislature (Assembly Bill, No. 361, January 22, 1900).

siana, Minnesota, and Wisconsin — place the managers of all private agencies under heavy bonds; and all of the States named also provide penalties for infringement of the law. Most of them, too, regulate the charges which the agencies can make, providing that no fee shall be charged unless a *bona fide* position is secured for the applicant. The table on the following page presents the existing legislation on these points.

Free employment agencies, as private or quasi-public institutions, already exist in large numbers throughout the United States, especially in the large cities. Many of the charity organization societies maintain employment bureaus incidentally to their work of relief, and sometimes, as in Minneapolis, Brooklyn, and Baltimore, independently thereof. In the two last-named cities this work grew to such proportions as to threaten to overshadow the more legitimate work of the society, and was therefore suspended except for destitute cases.* Many churches have employment features, as do also the Young Men's Christian Associations, Young Women's Christian Associations,† social settlements.‡ The Salvation Army has paid much attention to this phase of its many-sided work, more so in England than in this country, however. Most of the trades-unions have this feature more or less developed, restricted usually, however, to the trades interested. In Chicago at least two department stores have conducted employment bureaus, free to their customers, for female domestic servants. In Boston there are fourteen free employment bureaus connected with religious, philanthropic, medical, and other institutions.§ In New York || among

* *Proceedings of the National Conference of Charities and Correction*, Toronto, 1897, p. 211.

† *E.g.*, Y. W. C. A. and Women's Exchange of St. Louis. *Missouri Report*, 1892.

‡ *E.g.*, Hull House at one time did so. *Illinois Report*, 1898, p. 135.

§ *Massachusetts Report*, 1893, pp. 61-114.

|| *Fourteenth Annual Report of the Bureau of Labor Statistics of New York*, 1896, p. 923.

PROVISIONS OF LAWS REGULATING PRIVATE EMPLOYMENT AGENCIES.*

STATE.	Private employment agencies must have license.	Amount of license.	Private employment agencies must give bond.	Amount of bond.	Fines for infringement of law.	Payment and amount of fee regulated.
Colorado (1891) . . .	Municipal	\$100 an.	Municipal	\$2,000 ‡	\$100	Men, 5% of one month's wages Women, 2% of one month's wages
Illinois (1899) . . .	State	200 an.	State	1,000	50-100	
Louisiana (1894) . .	Permission of mayor	—	Municipal	5,000	25	
Maine (1895 and 1899)	Municipal	1 an.	—	—	50	No fee unless position ‡
Massachusetts (1894)	Municipal	1 an.	—	—	50-100	No fee unless position
Minnesota (1899) . .	Municipal	100	Municipal	10,000	100	No fee unless position
Missouri (1899) . . .	—	—	—	—	—	No fee unless position **
New Jersey (1893) . .	Licensing, bonding, regulating amount of fee, etc., left to common councils of each city in the State					
New York (1891) . . .	Permission of mayor	†	‡	—	50	No fee unless position **
Pennsylvania (1895) .	Municipal	50 an.	—	—	100	
Rhode Island (1896) .	Town councils may license and exact fee			—	10	
Washington (1897) ††	Municipal	\$100 an.				
Wisconsin (1899) †† .	Municipal	—	Municipal	1,000		

* Labor Laws of the United States. Second Special Report of the United States Department of Labor. Revised edition, 1896. Annual Bulletin of Legislation in the States. Published by the University of the State of New York. Laws of the States.

† Permission given commonly to cities of New York and New Jersey.

‡ Two sureties are required.

§ In Maine no fee over \$1 can be retained unless position is secured.

** Refusal to refund fee is a misdemeanor.

†† City of Seattle.

†† Agencies conducted by women only are excepted.

many are the Bible House, the Working-girls' Alliance, St. Bartholomew's Guild,* the Cooper Union Labor Bureau, conducted since 1895 by the New York Association for Improving the Condition of the Poor. Perhaps the assistance given the unemployed by many newspapers through the free insertion of want advertisements should be mentioned, since this method of seeking work often takes the place of a resort to the employment office.

Numerous as the free private or philanthropic agencies were in the United States, the stigma of charity attached to their work; and the best class of employees were not to be found on their lists. To meet this objection and at the same time secure their advantages, the next step was accordingly the establishment of free *public* employment offices; and to a consideration of these we may now turn. We shall take up the various States in the chronological order of the establishment of such offices by them.

Ohio.† — Ohio was the first and for a long time the only State to maintain free public employment agencies. The act establishing them was passed April 28, 1890, and was amended the following year, March 24, 1891. It created five free employment offices as adjuncts to the Bureau of Labor Statistics, and placed the appointment of the superintendents and clerks of the offices in the hands of the labor commissioner. The salaries of the officers were to be borne by the cities within which the offices were organized, but the general expenses were to be defrayed by the State. Each superintendent should make a weekly report

* *Year Book*, 1899, p. 295.

† *Reports of the Bureau of Labor Statistics of Ohio*, 1890-99.

The movement in Ohio was due directly to the example of France. Mr. A. W. J. Lewis, later commissioner in charge of the Ohio Bureau of Labor Statistics, was one of a group of labor representatives who attended the Paris Exposition of 1889; and what he there saw of the great public offices led him to advocate their establishment in his State. See the *Report of the Minnesota Bureau of Labor Statistics*, 1891-92.

to the commissioner, and lists of applications in each office should be sent weekly to every other office and there posted. The amendment of 1891 limited the tenure of office for all superintendents and clerks to two years. Since that time no further change in the law has been made.

Offices were opened during the summer of 1890 in the five leading cities of the State,— Toledo, Cleveland, Dayton, Cincinnati, Columbus. The success of these offices was marked from the start. For the first six months the applications for employment amounted to over 20,000, for nearly half of whom positions were secured. Perhaps the most striking testimonial to their success is to be found in the fact that, while there were at least twelve well-known private employment agencies in these cities at the time of the establishment of the public offices, the commissioner of labor reported in 1892 that they no longer existed in Columbus, Toledo, and Dayton, while only a few "still managed to exist" in Cleveland and Cincinnati. The facilities of the offices seem to have been made very general use of by employers, the applications for help sometimes outnumbering the applications for employment, especially in domestic service. The superintendents of the offices, reporting on this point in 1891, stated that employers generally favored the establishment of the offices, and that the working people were unanimous in their approval. Two of the superintendents, however, reported that manufacturers denied any need of such a bureau, since so many applications for employment were made directly at the factories. While this is true in general of skilled labor, it is of course less true of unskilled labor, and not at all the case with domestic and personal help. The activities of the offices are, therefore, particularly marked in the latter field.

The reports of the offices show a fairly steady growth from year to year, in spite of the depression of 1893, and

give evidence that the bureaus are filling a real want. While the number of applications for employment on the part of men has not changed materially, the applications for male employees and the number of positions filled has steadily decreased. On the other hand, the number of women dealt with, especially domestic servants, has grown continuously, seeming to indicate that the bureaus are becoming more or less "intelligence" offices of the familiar type for the registration of servants. There seems to be no desire in the State to abolish the offices, but the annual reports of the labor commissioner reiterate the demand for certain changes in the law which shall place them on a firmer basis. Objection is made to the provision which places the payment of the salaries of the superintendents and clerks upon the cities within which the bureaus are situated, partly on the ground that they are at the mercy of municipal politicians.*

Montana.†—The second State to establish free public employment offices by legislative enactment was Montana. An act providing for the establishment of a free employment bureau at the capital of the State was passed on February 25, 1895. The act as passed was an amendment to the law creating the Bureau of Labor.‡ The duties of the office were limited to recording applications

* Returns of five Ohio offices for selected years.

	1890.		1893.		1896.		1899.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Applications for employment	14,529	5,807	14,169	12,685	12,668	15,030	15,259	10,886
Applications for help . . .	11,453	6,701	8,626	11,403	3,078	12,632	6,216	17,681
Positions secured	5,875	3,413	4,666	8,635	2,781	10,164	5,058	9,931

† *Reports of the Bureau of Agriculture, Labor, and Industry of Montana, 1894-97.*

‡ *Montana Codes and Statutes, 1895, Part III., § 765.*

"in a book" and bringing employers and employees into communication with each other by the use of the mails. A small appropriation was added for clerical services, but no direct provision was made for other expenses of the office. Honest efforts seem to have been made to carry out the purpose of the act, and employers were notified of its existence by circular letter, notices in the newspapers, and poster advertisements; but the law soon showed its fundamental defects. The necessity of summoning and interviewing applicants was placed upon the employers. Thus the very feature which most commends such an institution to the employers of labor, that of securing without delay the desired help, was absent. At best the establishment of the office was premature; for the population is as yet too small to require its services, especially as situated in Helena. Moreover, many of the railroad and mining companies and other enterprises have their own employing offices, to which the men out of work make direct application. Owing to these and other reasons the work of the office did not show satisfactory results; and it was finally discontinued March 6, 1897. The act repealing the law which established the office provided that any municipality might organize such offices, but that the city should bear the expense. Thus far no city in the State has availed itself of the permission.

*New York.**—The third State in the Union to create free public employment offices by law was New York, by the act of May 25, 1896, which provided for the establishment of such offices in New York City and Buffalo. Owing to the crude provisions of this measure, which required, among other things, the sending of a weekly list of all applicants for employment or help to each of the 1,168 supervisors of townships in the State, it was re-

* *Reports of the Bureau of Labor Statistics of New York, 1896-98; and Bulletin of the Bureau, September and December, 1899.*

pealed in the following year, and replaced by the substitute act of May 13, 1897.

This act of 1897 provided for the establishment of free public employment bureaus in cities of the first class; namely, New York and Buffalo. Up to the present time, however, no appropriation has been made for the work in the latter city.* An annual appropriation of \$5,000 was made for the New York office; and the appointment of superintendent and clerks was placed in the hands of the commissioner of labor, under civil service regulations. All applicants are required to fill out statistical blanks, giving information as to age, nationality, occupation, wages, cause of idleness, references, etc. In addition to this information a confidential letter of inquiry is sent to the last employer of every applicant for employment, requesting testimony as to character and ability, the response being filed with the application. These letters are answered very generally and apparently truthfully. Not only are the interests of the employers thus safeguarded, but those of the employees also, by requiring, in cases where help is wanted out of town, that the railroad fare shall be paid to the destination, and that the employer shall meet the employee at the end of the journey.

The statistical information gathered on the blanks which are filled out in the office is tabulated and published in the annual reports of the bureau of labor. The statistics of the number of applicants show a decrease after the first few months. This was largely due to the exaggerated expectations that were entertained at the time the office was opened as to its ability to obtain work for all applicants. Since then the number of applications has decreased, while the number of positions secured has increased. In one occupation the demand has continually outrun the supply, — domestic service, and more particularly general house-

*I am informed that this will probably be done at the present session of the legislature.

work. The activities of the bureau are now confined almost exclusively to this department.*

Nebraska.—A free employment department of the State Bureau of Labor and Industrial Statistics was created by the act of April 13, 1897. The law is almost identical with that previously passed by Montana, on which it is evidently modelled. In accordance with this law the department was opened on May 1, 1897; and, though its success has been very meagre, it has continued to exist up to the present time.†

The same difficulties that resulted in the abolishment of the Montana office have shown themselves in Nebraska. The office should have been established in the industrial centre of the State, at Omaha; and, if an office were desired at Lincoln, it should be in the business section of the city, and not at the State capitol. The experience

*The work of the New York office from its establishment on July 20 1896, to January 1, 1900, is shown in the following table:—

	1896.†			1897.		
	Male.	Female.	Total.	Male.	Female.	Total.
Applications for employment	6,458	1,582	8,040	3,906	3,319	7,315
Applications for help. . . .	332	616	948	418	1,634	2,052
Situations secured	‡	‡	444	378	1,127	1,505

	1898.			1899.		
	Male.	Female.	Total.	Male.	Female.	Total.
Applications for employment	2,487	2,613	5,100	‡	‡	5,28
Applications for help. . . .	302	2,344	2,646	‡	‡	3,043
Situations secured	‡	‡	2,000	‡	‡	2,401

† July 20 to December 31, 1896.

‡ Not specified.

§ See the *Sixth Biennial Report of the Bureau of Labor and Industrial Statistics*, 1897-98, p. 1186.

in both Nebraska and Montana shows plainly, also, that the functions of a free employment agency should be kept entirely distinct from those of the Bureau of Labor, so far at least as concerns its immediate and primary object.*

Illinois.—The fifth State to establish free public employment agencies by law was Illinois, which provided for their creation in all cities of fifty thousand population or over by an act approved April 11, 1899. Three offices were accordingly opened in Chicago on July 31,—one on the North Side, one on the South Side, and the third on the West Side of the city. The law provides for the appointment for two years of a man superintendent at a salary of \$1,200, and of a woman assistant at not more than \$900 per annum. All expenses of the office are to be defrayed by the State. Weekly lists, showing the number and character of all applicants for positions and for help, are to be sent by each office to the Bureau of Labor Statistics, and a complete list to be mailed weekly from that bureau to each free employment office, to each State inspector of factories, and each State inspector of mines. And it is made the duty of these officials to assist in securing employment for such applicants, and to notify the superintendents of the employment offices of all vacancies that come to their notice. Superintendents of the free offices are, furthermore, empowered to spend not more than \$400 a year in advertising for positions. The Illinois law further contains a strike clause, which, as it does not appear in the laws of any other State, deserves to be quoted in full.†

*See the *Sixth Report of the Bureau, 1897-98*, p. 1186. None the less, the commissioner, in a letter to the writer, under date of December 13, 1899, writes enthusiastically of the results and outlook.

† "In no case shall the superintendent of any free employment office created by this act furnish or cause to be furnished workmen or other employes to any applicant for help whose employes are at that time on strike or locked out; nor shall any list of names and addresses of applicants for employment

In order to control and limit the number of private employment agencies, the law provides that all such agencies must pay a State license fee of \$200 a year and give a bond of \$1,000 "for the faithful performance of the duties of private employment agent." Previous to 1896 the payment of a municipal license fee of \$100 per annum was required in Chicago, but in that year the ordinance was abolished. During the last year (1896) in which any record was kept, 196 licenses were issued. Since the passage of the new law, no figures are available to show the number of private agencies now in the city.

The provisions for the collection of statistical data and for registration of applicants are more elaborate than in any other office. Every applicant for employment must fill out a list of some thirty questions, as to age, sex, nationality, conjugal condition, religion, length of residence, number of children, literacy, occupation, affiliations, cause of idleness, wages, health, references. Applicants for help are permitted to fill out a less formidable list. As in New York, and in identically the terms used there, a confidential letter is sent in each case to the last employer of every applicant for employment, requesting information as to character, sobriety, and obedience. When a call for help is made at the office, a suitable applicant is at once notified of the position by a reply postal, and is requested to use the return card to inform the office whether employment is secured. At the same time a note is sent to the prospective employer, notifying him who has been sent, and enclosing a postal card to be used in notifying the office, on his part, whether he has engaged the applicant sent him. In this way the closest possible control is maintained.

The Illinois law, as it is the latest, so it is one of the

be shown to any employer whose employes are on strike or locked out; nor shall such list be exposed where it can be copied or used by an employer whose employes are on strike or locked out." *Labor Laws of the State of Illinois*, 1899, p. 23, § 8.

best in this country for the establishment of free public employment offices. That some regulation of the private agencies in Chicago was needed, the accounts of their methods, in the newspapers and elsewhere, leave little doubt; while the results of the State free offices during the first four and one-half months of their existence seem to show that they are filling a real need and meeting with real success. An analysis of their work during this time shows that the men greatly outnumber the women,—in contrast with New York,—and that, while of course the great majority of positions secured are for unskilled labor, a wide variety of occupations is covered. Among the women, domestic servants constitute from a third to a half.*

Missouri.† — In 1891 Labor Commissioner Hall of Missouri visited the Ohio free public employment offices, and, in a highly commendatory review of their work in his report for 1892, advocated the establishment of similar offices at St. Louis and Kansas City. The Knights of Labor, in general assembly at St. Louis in November, 1892, also strongly indorsed the suggestion. A bill was accordingly introduced, embodying in the main the "Ohio idea," but failed to pass the legislature. In 1897 Commissioner Rozelle determined to carry out the plan without waiting for legislative enactment. Finding that the offices and clerical force of the factory inspector in St. Louis could be used for this purpose, he opened a free employment department in their rooms on October 4, 1897, as an adjunct to the Labor Bureau, and without additional expense to the State.

A fairly detailed system of registration is maintained,

*The report of their work from July 31 to December 16, 1899, is as follows:—

Applications for employment	24,984
Applications for help	19,198
Positions secured	14,851

† *Annual Reports of the Bureau of Labor Statistics of Missouri*, 1892, 1897, 1898, 1899.

applicants for help as well as applicants for employment being required to fill out blanks similar to those used in the California office * (to be described presently). "Whenever applications for help are received, a number of parties making application for such a position are notified by postal card, and given the address of the applicant for help. In this way the unemployed and the employer are brought together with little difficulty." † This system is similar to the Illinois plan, but not so commendable as that of California. In the *Twentieth Annual Report of the Labor Bureau* the commissioner writes: "Not the least service rendered the public by the establishment of the State free employment department has been the decimation of the fraudulent 'employment agencies,' so called, especially in St. Louis. Where sixteen of these concerns were said to exist only a year ago, only four are now to be found."

The work of the office in St. Louis was so successful that the legislature was finally induced to sanction its maintenance by the Bureau of Labor Statistics. On May 23, 1899, a law was passed providing for the establishment of free public employment bureaus in cities of a hundred thousand inhabitants or over. ‡ In accordance with this act the office at St. Louis was continued, and an additional one opened at Kansas City on December 18, 1899. § The number of positions secured during the same period is estimated at 800. The work of the St. Louis office is given in more detail in the following figures:—

* See below.

† *Nineteenth Annual Report of the Bureau of Labor Statistics*, 1897, p. 489.

‡ *Laws of Missouri*, 1899, p. 272.

§ During the first eight weeks of its existence the Kansas City office received 2,518 applications for employment and 800 individual applications for help, each of these orders numbering from 25 down to 1 person. (Letter from Superintendent Howard to the writer, February 12, 1900.)

	Oct. 4, 1897, to Oct. 1, 1898.			Oct. 1, 1898, to Oct. 1, 1899.		
	Male.	Female.	Total.	Male.	Female.	Total.
Applications for employment	5,680	2,103	7,783	3,933	916	4,849
Applications for help . . .				2,119	1,073	3,191
Situations secured			4,661	1,647	671	2,318

California.—Free public employment offices have been opened in two States, besides Missouri, by the Bureaus of Labor, without waiting for legislative action. These are California and Iowa. In California a free employment department was opened in San Francisco by the Bureau of Labor Statistics on July 15, 1895, and for nine months was carried on under the regular appropriations at the office of the bureau. At the end of that time private subscriptions amounting to \$970, which were raised among the business men of the city by the trades-unions, permitted the removal of the office to better quarters.

According to the report of the commissioner, "the main feature leading to the ultimate success of the undertaking was the selection of only reliable help for the employer; and for this purpose it was necessary to establish a system by which the applicant for work could be followed from the time he was found a position to the time when he again sought assistance at the bureau." * Each employer was required to fill out a blank specifying the number and sex of employees wanted, the kind of work, wages, and preferences as to age, nationality, and the like. Applicants for employment were required to fill out blanks, giving name, address, occupation, years of experience, wages expected, residence in State, nationality, literacy, conjugal condition, number in family, reasons for unemployment, and references. The data contained in these applications were entered in separate books kept for the

* *Seventh Biennial Report of the Bureau of Labor Statistics of California, 1895-96, p. 19.* Detailed tabular information is given in this report.

purpose. In addition, each applicant for employment who was sent to fill a position was given an employment card, stating his name and prospective occupation and wages. He was also given two postal cards to be delivered to his employer, one of which was to be used by the latter in notifying the department of the engagement of the applicant, and the other of his eventual discharge and the reason therefor.

During the first year of its existence, from July 15, 1895, to Aug. 1, 1896, 18,920 applications for employment were received, of which 14,251 were from men, and 4,669 from women. Of this number, 5,845 secured positions, 3,814 being men and 2,531 women. Out of the 5,845 persons furnished with positions, less than 30 had been reported on adversely. In spite of this promising beginning and in the face of potent arguments for the continuance of the work thus begun, the department was discontinued after a year.*

Iowa.†—Soon after the establishment of the Ohio free employment offices, agitation was begun in Iowa for the enactment of a law creating similar offices in that State. A bill drawn up by Labor Commissioner Sovereign and identical with the law subsequently passed in Montana—which was copied after this one—was introduced, but failed of passage. In 1894 another bill was introduced, providing for the establishment of free employment offices throughout the State; but this, too, failed to pass. A distinctly novel feature of the bill was the provision that the commissioner of labor and the county auditors should all establish free employment bureaus, or, rather, bureaus for the publication of lists of applicants in con-

*The labor commissioner, in a letter of October 13, 1899, says: "Such agencies are no longer maintained, as the legislature made no appropriation therefor; and, while a bill was drafted providing for the maintenance of free employment agencies under the supervision of this bureau, it failed of passage. And since then nothing has been done in the way of maintaining such agencies."

†*Fifth and Sixth Biennial Reports of the Bureau of Labor Statistics.*

nection with their offices. After the failure of the bill and the adjournment of the legislature, the commissioner of labor decided to test the practical utility of such a measure, and secured the voluntary co-operation of a majority of the county auditors in the State for the establishment of such offices as were contemplated in the proposed bill. But the plan met with no response from employers, and was soon given up.*

Washington.†—In the city of Seattle, Washington, there was established in April, 1894, a municipal free employment bureau, the only one of its kind in the United States. Originally created as an adjunct to the municipal office of labor statistics, it was later made a part of the Civil Service Department of the city on the adoption of a new city charter in the spring of 1895. The secretary of the Civil Service Commission assumed the office of labor commissioner, and has devoted a part of his time to the conduct of the employment bureau. The success of the bureau has been marked; and the increasing demands made upon it necessitated the appointment in 1897 of an assistant, a woman, who has charge of the woman's department, and in the following year the appointment of an additional clerk. The expansion of the work has also necessitated two removals of the office, each time to more commodious quarters.

The conditions of the labor market in Washington seemed to require the establishment of an employment bureau which should cover the whole field more completely than was possible for the private employment agencies. Situated as it is, Seattle is the outlet of streams of transient laborers on the way to Alaska and other points in

* *Sixth Biennial Report*, p. 14. Commissioner O'Bleness writes: "From some cause or other, it did not meet with success. The bureau was maintained for five months; and during that time, although applications for situations were numerous, the commissioner was unable to secure work for a single applicant, and abandoned the attempt."

† *Annual Reports of the Commissioner of Labor of Seattle, Washington*, 1894-99.

the North-west. Many of the industries, too, which are carried on in the State, are of a seasonal and variable character, such as hop-picking, fishing, logging, railroad work, calling for constant readjustment and redistribution of the labor force. This fact is very clearly seen in the statistics of the work done by the bureau, in which I have separated the hop-pickers and railroad laborers from the other applicants. Of course, this extension of the business of the bureau would not have been possible without the co-operation of the employers of labor; and in this regard Commissioner Grout seems to have been particularly successful, as practically all labor for the railroads and the hop-fields in the State is obtained through the agency of the municipal office.

In the administration of the bureau the commissioner has sacrificed the statistical part of the work, with the accompaniments of detailed registration, to the more practical end of securing speedy employment for all applicants. Accordingly, no figures are given of the number of applications for positions or for help, but only of positions filled. The number of persons for whom work has been secured, even after eliminating the most fluctuating elements, shows a very steady growth. Although a municipal office, its usefulness is not limited to the city, applications for labor having been received from almost every town in the State, and from Alaska, British Columbia, Oregon, Montana, and Idaho. An analysis of the positions filled during 1898 showed that about 63 per cent. were of "common, unskilled labor," 30 per cent. "vocations requiring some knowledge or skill," while only about 7 per cent. represented skilled trades.* This last figure was doubled the following year, but the work of the bureau has been largely confined to the class of unskilled labor. About nine-tenths of these positions are out of the city. Private employment agencies seem to have been largely displaced

* *Fifth Annual Report, 1898.*

by the municipal bureau; and the number of these, though fluctuating, was reduced to seven at the end of 1899. All private agencies are required to secure a license from the city and pay an annual fee of \$100.*

In addition to the States where the experiment has actually been tried, the establishment of free public employment offices has been agitated in a few others. At the National Convention of the Officials of the Bureaus of Labor Statistics, held in Denver, 1892, the question of employment bureaus was discussed and the following resolution passed: "*Resolved*, That the commissioners of labor of the different States recommend to the legislatures of their respective States the advisability of creating free public employment offices, under State control and supervision." This was apparently not done by all the commissioners, and by some only in a perfunctory way, so that little result was obtained. Following the lead of Ohio, agitation for the establishment of similar offices was begun in Michigan in 1896 by the organization in Grand Rapids of a committee of sixty prominent citizens to consider the matter. This committee advo-

*The following figures show the work done by the bureau from April 1, 1894, to January 1, 1900:—

SEATTLE: POSITIONS FURNISHED.

YEAR.	1894.†	1895.	1896.	1897.	1898.	1899.
Total	2,623	3,729	3,368	5,953	13,871	18,153
Hop-pickers . .	1,144	2,050	135‡	2,890	2,235	2,682
Railroad laborers	‡	1,311§	571§	2,784	7,077	2,102
Grand total . .	3,967	5,779	3,403	11,626	24,183	22,837
Total expenses .	\$909.65	\$1,120.00	\$727.50	\$734.80	\$1,377.13	\$1,136.66
Cost of each position furnished	\$0.2293	\$0.1938	\$0.2138	\$0.0624	\$0.0569	\$0.05

† Nine months.

‡ Not specified.

§ General laborers included in totals above. Office did not act as agent for the railroads before 1897.

|| Almost total failure of harvest.

cated the scheme and even drew up a plan for the establishment of a municipal bureau, but unexpectedly met with opposition from the labor unions, which feared that such an office might be used against them in case of strikes.* The plan was therefore given up. The establishment of such offices has also been under consideration in Massachusetts, Minnesota, New Jersey, and Colorado.†

The account thus far given of free public employment offices in the United States, taken largely from the reports of the offices themselves, has not been a very encouraging one. Not even the most ardent advocate of their extension would contend that they have been attended with striking success. Of the nine States in which their establishment has been attempted, they have been given up in three,—Montana, Iowa, and California,—while in Nebraska the office is struggling along with very unsatisfactory results. In these cases the establishment of the bureaus seems to have been premature and not called for by the needs of the community (except perhaps in California), but to have been advocated or created by the politicians as a sop to the laboring classes.‡ In only five States—namely, Ohio, New York, Missouri, Illinois, and Washington—is there such an increase in the number of applications and positions secured as to indicate a steady growth in usefulness. The municipal office at Seattle appears to have met with success a real want in the community where it is located, and to have enlisted most fully the co-operation of both employers and employees. But one of the main elements in its success is the fact that it

* Letter from A. O. Crozier, chairman Committee of Sixty, November 7, 1899.

† *Massachusetts Report*, 1893, p. 58; *Minnesota Report*, 1892; *New Jersey Report*, 1895, p. 117. Cf. *Lend a Hand*, vol. xii. p. 133.

‡ The commissioner of the Montana bureau, in a letter to the writer, ascribes the failure of the office in that State to the dislike of it as a Populist measure.

has had to deal largely with unskilled labor. So far, at least, the offices have been used very little by members of skilled or well-organized trades; and their representatives seem to think it doubtful if they ever will be. An analysis of the occupations of those applying for employment, particularly in the large cities, shows that the majority of the men are unskilled laborers; and another large portion may properly be classed under the head of domestic or personal service,—coachmen, gardeners, hostlers, waiters, hotel employees, and the like. The women are recruited almost entirely from this latter class. The writer has visited several of the offices, and in every case has been forcibly impressed by this fact. In so far the expectations of the friends of the offices have been disappointed, for they had hoped to see them used less by domestic servants and more largely by skilled artisans and mechanics.

The public employment offices in this country do not seem to have encountered any opposition* due to industrial disputes, such as has made their success problematical in Germany. With the exception of the Illinois law, which forbids the offices furnishing employees during a strike, there is nothing in the various acts to regulate their administration under such circumstances. As a matter of fact, the management of the various offices has differed in this respect, even within a single State.† While the representatives of organized labor are, on the whole, in favor of the free public employment offices, they are unanimous in insisting that they shall be held entirely neutral during labor disputes. In the event of strikes they should not be permitted to furnish men to fill the place of strikers, and in case of disputes as to wages they should not attempt to provide employees at

*Except in Grand Rapids, as stated above.

†Thus, in Ohio, the Dayton office sends men to fill the place of strikers. The others do not.

a lower rate of wage than that for which contention is being made. It was feared that the insistence upon references would militate against the offices among the working people by introducing the hated "character-note"; but so far little objection has been met on that score. Yet one of the first essentials for the success of such offices lies in the selection of the applicants. Without such selection employers will not, as a rule, use them. And thus, as to the general outlook for the free offices, the following paragraph from the exhaustive report of the English Department of Labor on "Agencies and Methods for Dealing with the Unemployed" will apply equally to the United States:—

With the best of conditions, labor bureaus can hardly be expected to become the sole or principal means of bringing together employers and unemployed. The bulk of the work of hiring labor and seeking employment will, in most trades, continue to be done directly between workmen and employers, as is the case where, as in France, the system of bureaus has been carried much further than in the United Kingdom. Nor as regards the organized trades can labor bureaus, as a rule, compare in utility, so far as workmen are concerned, with the work of a well-managed trade society. The chief field of usefulness of labor bureaus is likely, therefore, to be found for some time to come in the less highly organized trades.

II. GERMANY.

Before proceeding to consider the comparatively recent movement for establishing free public employment offices in Germany, it will be instructive to glance at various other agencies which have been resorted to there. These may be divided into at least four groups,—private pay agencies, philanthropic employment offices, and agencies conducted by associations of employers or unions of workmen.

In spite of the rapid growth in number of the free

offices, within the last decade especially, the private employment agencies are probably still in the majority; and in certain occupations they exercise almost a monopoly. They are made use of particularly for domestic servants, employees in mercantile establishments, hotels and restaurants, farm laborers, sailors, actors.* Though evils are complained of in connection with these offices, they are apparently not so great as in the United States, since all employment agencies are placed under police control by imperial law, and are made to pay a license fee. According to a statistical investigation carried out in Prussia in 1895, the number of such agencies in that kingdom alone was 5,216. During the year 1894 these 5,000 agencies had received 535,020 applications for employment, 481,358 applications for help, and had secured 381,206 positions.†

Under philanthropic employment offices we may include those conducted by religious societies, charitable organizations, communal or police officials, the lodging-houses (*Herberge*) of various societies, the relief stations (*Naturalverpflegungsstationen*), and the like. Together these form a perfect network of agencies throughout the empire for the purpose of securing work for the unemployed; but, inasmuch as they deal largely with the shiftless and incapable classes and those who do not wish to secure situations, the statistical results of their work are not very favorable. Since, however, they are free employment offices, no charge being made, and are also in large part public (in that they are either connected with public institutions or aided by public funds), it will be advisable to consider them briefly.

Most of these agencies are connected with the various institutions established for dealing with and suppressing

* V. Weigert, *Arbeitsnachweis und Schutz der Arbeitswilligen*, Berlin, 1899, p. 2.

† *Zeitschrift des königlichen preussischen statistischen Bureaus, Jahrgang 36*, 1896, pp. 7-11.

vagrancy.* The Anti-begging Societies (*Vereine gegen Armennot und Bettelei*), which are organized in all towns and cities throughout Germany, discourage the giving of alms and require their members to refer all applicants to the office of the society. With this an employment bureau is connected, and an attempt is immediately made to secure work for the applicant. The society further provides a relief station (*Verpflegungsstation*), where by a few hours' work the destitute wayfarer can earn a ticket which will entitle him to food and lodging at the lodging-house (*Herberge*). If no work can be found for him in this locality, he is next day given a card to the next *Herberge*, where he must report that afternoon, and there in turn make application for work. If he wanders from the route which he has chosen, he is liable to arrest as a vagrant. The Anti-begging Societies are supported entirely by private subscriptions; but practically the same work is done by the public authorities in most of the German States by the establishment of public stations giving relief in kind (*Naturalverpflegungsstationen*). Of 1,957 such stations maintained in Germany in 1890, 1,707 were maintained by public authority, and 250 by societies. Similar work is also done by the German Lodging-house Society (*Deutscher Herbergsverein*), which has established in all the States a number of lodging-houses for wayfarers in search of employment, the institutions being maintained largely by provincial or local societies. These various relief stations and lodging-houses, together with the labor colonies, have succeeded in legitimatizing the movements of a class which without them would become mere vagrants. They have therefore reduced the number of arrests for vagabondage,† but do not seem to have contributed in any permanent way towards solving the

* *Vagrancy and Public Charities in Foreign Countries*, Special Consular Report, Washington, 1893, pp. 293, 305, 320, 329, 340.

† In Prussia the number decreased from 23,808 in 1882 (no stations) to 8,605 in 1890 (951 stations).

problem of the unemployed by securing employment for them.

The establishment of employment offices has also been fostered by the various trade organizations, both those conducted by the employers and those managed by the laborers. While at first their creation seems to have been inspired only by the motive of adjusting the labor supply and demand, of later years they have been used extensively by both sides as a *Kampfmittel* in the struggle between labor and capital. As this movement has led to the establishment of offices by a variety of organizations, it will be necessary to consider these separately.

(1) Following the example of the early guilds, the modern *Innungen* have also endeavored to secure employment and help within their respective trades by undertaking the duties of employment offices. Though in the main they comprise only a small portion of the members of the various trades, still a few of them, as the barber guild, are of national importance. The possibility of an extension of this side of their activity was afforded them by a provision in the industrial code of July 26, 1897,* according to which the establishment of employment offices is expressly enumerated among the privileges of the guilds. It is unlikely, however, that they will assume any greater importance in the future, as they are managed largely in the interest of the employers, and seem to be losing ground. They have gained a stronger foothold in northern Germany than in the south. In Prussia 734 such employment offices were reported for the year 1894, of which 642 made no charge. Most of the others charged only a nominal fee. These offices further reported for the same year 121,342 applications for employment, 54,614 applications for help, and 47,093 positions secured.

(2) Employers' organizations (*Gewerbe- or Fabrikanten-*

* *Gewerbeordnung*, §§ 81 a, 88, etc. Quoted by H. Eekert, *Die beste Organisation des Arbeitsnachweises*, p. 6.

vereine). Towards the end of the eighties the employers of labor began to unite with the avowed purpose of opposing the socialistically inclined laborers' organizations. One of the principal means used by the newly formed unions as well as the older ones was the establishment of employment offices, "which should be managed exclusively by employers, and whose members should pledge themselves to obtain labor only through these offices."* The alliance of master-masons and carpenters and the association of metal-workers were the first larger organizations of employers to adopt this rule, as well as the further one "to employ no laborer who belonged to any social-democratic association." This attitude, it is needless to say, does not commend their employment offices to the mass of laborers, nor indicate that they are managed in an impartial manner. Such agencies have been created, in addition to those of the metal-workers and masons and carpenters, by the smiths, book-binders, paper-hangers, painters, cabinet-makers, and potters. They exist also in the textile industries and in the building trades.† Of such organizations some thirty conducted employment offices in Prussia in 1894, of which about half the number charged a fee. These offices reported 34,873 applications for employment, 17,400 applications for help, and 16,910 positions secured. In addition to the organizations of manufacturers the agrarian unions have in many instances established employment bureaus, of which sixteen were reported in Prussia. These received during 1894 3,759 applications for employment, 2,612 applications for help, and filled 1,629 positions.

(3) Workingmen's organizations (*Fach- or Gewerksvereine*). Since the founding of the Hirsch-Duncker trade unions, which made the employment feature an important part of their work, many of the workingmen's organizations have established employment offices. As

* Weigert, *loc. cit.*, p. 6.

† Richard Calwer, *Arbeitsmarkt und Arbeitsnachweis*, Stuttgart, 1899, p. 44.

a rule, however, they have not attained a position of importance, being necessarily conducted at a disadvantage, usually open in the evenings only, and administered by the secretary or other official of the union in connection with other duties. Unfortunately, their management has often exposed them to the same charges of partiality of which the workingmen are ready enough to accuse the employers' offices. Not infrequently, too, the offices have been used as a weapon in the struggle against the employing class, as in the case of the Berlin beer boycott of 1896. This boycott, which had assumed immense and ominous proportions, was finally settled by the establishment of a joint employment office, conducted by a joint committee of employers and employees. Of offices managed by the workingmen alone, there existed in Prussia during 1894 about 300, of which only 230 made reports. These 230 offices received 76,046 applications for employment, 32,968 applications for help, and secured positions for 26,760 persons.

(4) A small number of employment offices have been established which are managed jointly by representatives of employers' and laborers' organizations. They have been called into being largely by the efforts of some more liberal-minded employers, who have desired to avoid the unfairness of those offices managed exclusively by employers or by employees; and they have been fairly well received by the laboring men. They were opposed, however, by the Employers' Conference at Leipzig, in 1898, and have not obtained any great prominence, especially as the growth of public bureaus has rendered them to a large extent unnecessary. They are especially prevalent in mercantile circles. In Prussia, 60 such offices were reported, of which only 46 made returns. During 1894 these received 58,584 applications for employment, 33,153 applications for help, and furnished 23,129 positions. About half of these offices required the payment of a fee, ranging from \$1.25 to \$5.

Although many—in fact, most—of the employment agencies which have already been mentioned are free, and are in the main open to all applicants, they are not public in the sense of being supported by public funds. The movement for the establishment of free public employment offices, either communal or municipal, has grown rapidly in the last few years; and at present such offices are maintained in most of the principal cities and towns in Germany. The first such agency seems to have been established at Freiburg i. B. in May, 1892, by the joint action of the organizations of employers and the labor unions; but it did not come under municipal management and control until 1897. The real impetus to the movement, however, was given in the autumn of 1893 by a report of the Stuttgart Trade Council (*Gewerbegericht*), which strongly advocated the establishment of a municipal employment bureau in that city. Although the plan was not carried out at the time, it met with the warmest approval the following year at the meeting of the Social Congress at Frankfort a. M. where it was advocated both by workingmen and capitalists. The plan suggested there formed the basis of the various municipal offices, which sprang up in rapid succession in all parts of the empire. In South Germany, especially, the movement met with success. In Würtemberg, Bavaria, Hesse, Baden, and Prussia one city after another proceeded with the establishment of public bureaus. It is impossible to say how many such offices exist at present in Germany, as no authoritative list has been published and the number is large and steadily growing. Dr. Freund, superintendent of the Invalid and Old Age Pension Office at Berlin, estimated the number in 1899 at about 114.*

The fundamental principle of the public offices is equal representation: employers and employees are both represented in the management in equal proportion and with

* Freund, *Arbeitsnachweise*, Berlin, 1899, p. 13.

equal powers. In general, the administration is connected with the Trade Council (*Gewerbegericht*), and a city official is the chairman of the governing board. These offices are, of course, free to all applicants of any trade or occupation. The organization and administration of the Munich office—which is admittedly the best managed and which has served as a model for many of the others—will serve to illustrate the general features common to them all.* The ultimate oversight of this office resides in the city magistrate; but its immediate control rests in the hands of an elective board of seven, of whom three are employers and three employees, the chairman of the Trade Council being *ex-officio* chairman of the board. The office has a men's division, where three assistants are employed, and a women's division, where there are also three assistants. It receives applications for every sort of employment, and during the year 1898 secured positions for over 32,000 persons. The total expenses of the office, which are borne by the city of Munich, amounted to only about \$3,650, of which \$500 went to rent. The work of the office is administered with typical German thoroughness. Applicants for employment are divided into classes, according to occupation,—32 classes for men, 10 for women, each class having a separate and detailed list. Every applicant is required to fill out a statistical blank, giving occupation, name and so on, and is given a card with his number. If a suitable position is open, he is sent immediately or notified by post to go to the prospective employer, to whom he hands a postal card addressed to the employment bureau, which legitimatizes him and which the employer is supposed to fill out and send back. The applicant is also required to report the result of his application to the bureau. By this system and by frequent use of the post the bureau seems to have been suc-

* *Die Einrichtung von Arbeitsnachweisen und Arbeitsnachweis-Verbänden. Verhandlungen der ersten deutschen Arbeitsnachweis-Konferenz, Karlsruhe, 1897, herausg. von J. Jastrow, Berlin, 1898, p. 42.*

cessful in keeping track of all positions filled. Owing to the German system of police oversight and particularly the compulsory use by domestic servants of registration books in which their places and terms of service are all noted, less time is devoted to looking up references than in similar bureaus in the United States. The name of an applicant is kept on the books as long as two months. After the expiration of that period the application must be renewed.

Although the Munich office was not established until 1895, it has served as a model for most of the later offices, much as the Ohio agencies have in this country. In the smaller towns the administration is, of course, much more simple and direct. The development of the separate offices had not proceeded very far, however, before the need was felt of a more centralized system, by means of which the various offices could be brought into closer touch with one another. The matter was first agitated by the Würtemberg government, and soon after by Bavaria, Baden, Hesse, and Prussia; and, although the movement is as yet only in the experimental stage, it has been fairly well developed in these States. In Baden, for instance, reports are sent in by the other offices to the Karlsruhe office, which acts as a central clearing house, and sends out again immediately the reports of each office to every other office. Each office is then in a position to send applicants to fill openings in other places or to request help from the district where there is a surplus. In Würtemberg the Stuttgart office acts as the central agent, and sends out reports of all vacancies twice a week, not only to all the other employment offices, but to every town of more than 3,000 inhabitants, and to all institutions which maintain employment features. In Düsseldorf a slightly different method is used. Instead of letting one of the employment offices act as clearing house for the others, an independent central bureau has been established, whose

sole duty it is to act as agent between the various offices. Some sort of centralized system has been found so necessary for the best results that a closer union between the different States has been advocated by means of the establishment of an imperial central bureau. While such a move is very unlikely in the near future, the necessary bond of union has been created by the formation (February 4, 1898) of the "Association of German Employment Offices," whose first meeting was held in Munich in September, 1898. Its object is the creation of a deeper interest in the work and establishment of employment offices, and to secure the collection of uniform statistics.* At the time of its formation 68 bureaus were enrolled as members, of which 30 were municipal, 8 provincial, and the rest philanthropic and private free instructions. A monthly journal, *Der Arbeitsmarkt*, has also been published in Berlin by Dr. Jastrow, who seeks to tabulate and utilize these statistics to determine accurately the fluctuations of the labor market.

The majority of the public employment offices in Germany are municipal; but many of them are aided by the State, especially in South Germany. Frequently, too, grants have been made by State, province, or municipality to employment offices maintained by joint boards of employers and employees; while no attempts have been made to share in the administration. In fact, like so many of the German social reform movements, the initiative and support for this one seems to have come largely from the government.

It is difficult to say what the attitude of the labor unions or their members is towards the public employment offices, as opinions in these circles are widely divided.† Those workingmen who see in the agencies only a

* The stenographic report of the proceedings of this meeting has been published as a supplement to No. 11 of *Soziale Praxis*, and also separately as *Schriften des Verbandes deutscher Arbeitsnachweise*, No. 1. Berlin, 1899.

† Calwer, *loc. cit.*, p. 7.

weapon in the struggle with capital oppose their establishment, as they fear that they will be used to their disadvantage. And, in fact, the tone of the discussion in the Munich Conference on the subject of "What can the Employment Bureaus do to secure Laborers for the Agricultural Districts?" seemed to lend color to that idea.* On the other hand, the attitude of the organized employers is also largely hostile to the extension of the public offices.† It is only fair to say, however, that extreme opposition is not often shown except by the agrarian members.

One of the most disputed points and one which was most strongly insisted on by the labor unions at the beginning of the movement for public employment offices was the attitude of the office during a strike. The unions demanded that no help should be furnished to an establishment or industry while a strike was in progress. This more extreme position has not been strictly adhered to, and at a preliminary conference held at Karlsruhe in 1897 the representatives of the labor unions declared that they would be satisfied to have the offices continue their activity during a strike if the officials would only acquaint all applicants with the fact that a strike was in progress.‡ Among the different offices the practice varies in this regard. In Stuttgart the office continues its work without interruption; in Strassburg the governing commission decides whether to stop or not; the same is true of Mainz, Trier, and a number of other cities; Cologne discontinues the work of the office during a strike; in Breslau and Frankfort a. M. no rules for the conduct of the offices at such a time have been formulated. It may safely be said that the fear on this point was largely groundless, and that it makes no practical difference as to the outcome of

* *Verhandlungen der Münchener Konferenz*, p. 6, ff.

† Weigert, *loc. cit.*, p. 33.

‡ *Verhandlungen der Karlsruhe Konferenz*, p. 69.

a strike whether the employment office ceases its activities or not. So many other factors enter that the existence of such an agency and its attitude can have very little effect one way or the other.

In spite of some antagonisms and difficulties at first, the German free public employment offices have met with decided success. Their number has grown from a dozen in 1894 to over one hundred in 1899, while the extent of their activity has more than kept pace with their growth, in numbers. The positions secured for applicants numbered about 190,000 in 1896 in all the "free" bureaus, while by 1898 they amounted to over 250,000.* One noticeable fact is shown by the statistics of the German agencies, which points to a high degree of success,—the relatively small number of women applicants. Of the men for whom positions were secured, by far the larger part belonged of course to the class of unskilled labor; but the more skilled trades and occupations were also well represented.

It will at once be seen that, though the movement is a more recent one, it has proceeded farther in Germany than in the United States, and has met with a much greater degree of success. Aside from the undoubted advantages which the German offices possess in the concentration of the population and the smallness of the area that they have to deal with, there seems to be no doubt that such institutions find a more favorable reception on the continent of Europe than in this country. The differences in industrial conditions, indeed, are so great that probably little is to be learned from German experience which will materially aid us in the United States in solving the problem of finding work for the unemployed by means of free employment offices.

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* Weigert, *loc. cit.*, pp. 70-75; Jastrow, in *Arbeitsmarkt*, 1898.

THE HOUSING PROBLEM IN GREAT CITIES.

THE recent Tenement House Exhibition in New York marks a noteworthy event in metropolitan sociological history. An immense crowd — more than could gain admission — attended the opening; and thereafter during two weeks the rooms were visited by large numbers of interested and curious folk of high and low degree. Some were amazed, some saddened, and probably all were impressed with the unanswerable demonstrations, by means of models, photographs, and charts, of the close relations between bad housing, bad health, bad morals, and bad citizenship.

The housing question is the most fundamental of social problems relating to environment. The dictum of the late Cardinal Manning, "Domestic life creates a nation," is absolutely sound. The corollary is also true: the lack of domestic life will unmake a nation. The home is the character unit of society; and, where there is little or no opportunity for the free play of influences which make for health, happiness, and virtue, we must expect social degeneration and decay. Inspect the charts of the whole tenement region of New York City as they were displayed at the Tenement House Exhibition, and note the formidable part played by bad housing in the generation of social ills. Great cities are the danger points of modern civilization, and any community which leaves to a large part of its inhabitants inadequate facilities for the true development of domestic life must fight deteriorating forces at tremendous cost. The relation between humanity and its environment is very close. Strong-willed, intelligent people may create or modify environment. The weaker-willed, the careless, and the unreflecting are dominated by environment. Such is a fairly rough estimate of the relation.

For all but the exceptionally strong and virile, home environment determines the trend of life. Populous masses herded together, as they are over large areas of the tenement regions of New York City, with difficulty resist the influences by which they are surrounded.

The English Royal Commission of 1885 on the Housing of the Working Classes, speaking of the environment of the wage-earner living in low parts of London, gave the opinion that the statistics of annual disease consequent upon overcrowding would not convey the whole truth as to the loss of health occasioned by it. The London Board of Health instituted inquiries in such neighborhoods to see what amount of labor was lost in the year, not by illness, but by sheer depletion of physical vitality. They found that residence in congested neighborhoods where houses were inadequately supplied with light and air meant on the average a loss of twenty days per annum to each workingman and working-woman.

Charts at the Tenement House Exhibition showed the intimate relation between overcrowded, ill-lighted, and ill-ventilated houses and certain forms of disease, notably tuberculosis, diphtheria, typhoid and scarlet fever. The relation between poverty and bad tenement houses was also strikingly displayed in another series of charts covering the entire tenement region of the city. The Charity Organization Society has discovered that poverty is a contagious disease. "The applications for charity," say they, "spread through a house just as tuberculosis might. This involves a lowering of the whole social tone of the house. One family applies for charity, and gets it. Another woman, struggling hard to support herself and children, says, 'What is the use of my working so hard?' and applies for charity; and that is the beginning of the breaking down of the family's self-respect." Commissioner Keller, head of the Department of Charities of New York, bore eloquent testimony in confirmation of the foregoing statement.

Then, too, there is the great question of drunkenness. It is absurd to suppose that immoderate drinking of liquor can be suppressed so long as people are left to live in houses where lack of elementary sanitation saps vitality, while noisomeness and unattractiveness impel a search for outside relief. While I am not disposed to seek cause and effect in conjunction of circumstances, yet I am bound to believe that the massing of saloons in low neighborhoods where the worst housing conditions exist is more than a simple coincidence. The most congested districts in New York are also the regal domains of liquordom. Some years ago the Church Temperance Society published a chart showing that 148 saloons were all located within a space 514 yards long by 375 yards wide. St. Giles Ward in Edinburgh contains 127 drinking-places to 284 shops where food is sold. Possibly there is a fair index to relative patronage in the fact that the rental of the latter amounts to only 80 per cent. of the rental of the former. This ward contains one-eleventh of the population of the city, but it furnishes one-third of its total crime. Notwithstanding that 17½ per cent. of its area is made up of parks, the death-rate is 40 per cent. higher than for the whole city. Glasgow's famous Sanitary District 14, with the largest proportion of inmates per inhabited room, the highest death-rate over all, the highest death-rate under five years, the largest proportion of deaths under one year, the highest record for nuisances brought to the attention of the Board of Health, the highest percentage of inhabitants paying neither local rates nor school tax,—the latter of which they are obliged by law to pay,—contains 43 public houses to 104 premises for food supply, with rentals and receipts largely in favor of the public house.

Then there is the moral side. Promiscuity in human beehives renders independence and isolation of family life an impossibility, and destroys modesty and personal

carefulness. In the general herding process every member of the family, from earliest childhood, becomes an easy prey to the forces which drag down. Unwholesome sights and sounds fix themselves in the memories of children ere infancy is really past. The exuberance of youth, finding no possibility of expression inside the home, is poisoned by the streets. Death-rates are, after all, but a feeble index to the drawbacks of congested tenement life. There is no death so sad as the death of virtue, the breaking down of ideals, the deadening of lofty desire in the soul.

New York has had periodical round-ups, official and private of tenement-house conditions. The earliest was in 1846. In 1856 there was another, one in 1867, one in 1884, and one in 1894. I think it fair to say that practical results of greater or lesser consequence have followed each one of these efforts. Had it not been for the enlightenment thus repeatedly afforded the public, and the improvement in law and practice generated by public opinion, conditions doubtless would be much worse in New York than they are to-day. But I think ideas of the value of preventive effort, and the necessity of saving citizenship will be more widely disseminated than ever before as the result of object-lessons afforded by the recent Tenement House Exhibition.

The Exhibition included a number of models of tenement houses, good and bad; over 1,100 photographs, illustrating every phase of the housing problem of special interest to New Yorkers; maps, charts, and tables of statistics, the latter illustrating particularly the results attending model tenement house building all over the world, suburban dwellings, lodging-houses, health and poverty conditions, agencies for betterment, such as public baths, parks, and playgrounds, and about 200 competitive plans for model tenements drawn for plots of ground of different size. The feature which aroused, shall I say,

contemptuous interest, was the model of an existing New York block, bounded by Bayard, Canal, Chrystie, and Forsyth Streets, as it stood on January 1, 1900. This is by no means the worst block in the city, but was selected because it presented a considerable variety of conditions. It is made up of 39 tenement houses, containing 605 different apartments, inhabited by 2,781 people, of whom 466 are children under five years of age. There is not a bath in the entire block, and only 40 apartments are supplied with hot water. Water-closets are used in common. There are 441 dark rooms, having no ventilation to the outer air, and no light or air except that derived from other rooms. 635 rooms get their sole light and air from dark, narrow air shafts. There are 10 rear tenements. The rental derived from this block, including the shops, amounts in round numbers to \$114,000 a year.

In another large block, bounded by West 61st and 62d Streets and Amsterdam and West End Avenues, a model of which was not explicitly shown, but to which a model, representing a block built up with so-called double-decker houses,* would practically apply, about 4,000 people are now herded. Less than half of the rooms in the houses have windows to the outer air. Not a single bath-tub is

*The double-decker was thus described in the report of the Tenement House Committee of 1894: "It is the one hopeless form of tenement-house construction. It cannot be well ventilated, it cannot be well lighted. It is not safe in case of fire. It is built upon a lot 25 feet wide by 100 or less in depth, with apartments for four families in each story. This necessitates the occupation of from 86 to 90 per cent. of the lot's depth. The stairway made in the centre of the house and the necessary walls and partitions reduce the width of the middle rooms (which serve as bedrooms for at least 2 people each) to 9 feet at the most, and a narrow light and air shaft now legally required in the centre of each side wall will further lessen the floor space of these middle rooms. Direct light is only possible for the rooms at the front and rear. The middle rooms must borrow what light they can from dark hallways, the narrow shafts, and the rear rooms. Their air must pass through other rooms or the tiny shafts, and cannot but be contaminated before it reaches them. A five-story house of this character contains apartments for 18 or 20 families,—a population frequently amounting to 100 people, and sometimes increased by boarders or lodgers to 150 or more." About 2,000 such buildings are constructed annually in the city of New York.

provided, except in two houses where six families have a private bath. 800 families have no bathing facilities within their dwellings.

In striking contrast to these dark, ill-ventilated human hives were shown plans of the buildings erected only 200 yards away by the City and Suburban Homes Company, the largest and most important of the agencies for improved housing in New York. The ground unit for the double-decker is a lot 25 by 100 feet, and experience has shown that it is practically impossible to build a satisfactory tenement house on a lot of this size. The unit of the City and Suburban Homes Company's buildings has a frontage of either 50 or 100 feet, with 100 feet depth. In the centre of each unit of 100 feet is a full-sized court, 30 feet square; and between 2 100-foot units is a recessed court, 18 feet wide and 65 feet deep. Thus apartments are nowhere more than two rooms deep, and are lighted and ventilated from two sides. There is not a single dark room or even dim room in the whole building. Every apartment is a complete home in itself, separated from others by deafened partitions, and containing a water-closet, stationary wash-tubs and sink, hot water supplied from central boiler system, gas fixtures and gas attachment to stove or range, clothes closets and dressers, mantels, and the like. Stairways and stair halls are steam-heated. There are shower baths on the ground floor and tub-baths in the basement, as well as laundries and steam drying-rooms for the free use of tenants. Dumb-waiters are used to bring up articles from the cellar. The buildings are practically fireproof.

The rentals of these apartments average about ninety-three cents a room a week. Computed on the basis of rental per square foot of floor space, the price is not higher, and probably not as high, as in the wretched blocks already described.

In the new buildings which the City and Suburban

Homes Company has built on the upper east side, apartments are provided with gas range and with steam heat as well. The company so fixes its rentals as to return 5 per cent. upon its investments. The west side buildings have earned this sum; and it is expected that the newer ones of the east side, which have just been opened, will do as well.

Some years ago an interesting suggestion for municipal co-operation was made by Mr. I. N. Phelps Stokes. It was that a municipality in condemning blocks for small parks should sell a space 40 feet wide running the whole length of each side of the block to Model Tenement Companies, or private owners, who would agree to erect tenements thereon under certain reasonable restrictions. The result would be that apartments would have a depth of two rooms only, and excellent facilities for light and ventilation would result. The interior space would be reserved for the park proper, and the block would be open at both ends. Mr. Stokes showed a model of this scheme at the Exhibition. If the scheme were adopted, many more small parks would accrue to a city for the same expenditure of money; and, what is equally important, a large number of improved tenements as well. There can be no question of the utility, and there ought to be no obstacle to the feasibility, of so commendable a plan.

There were other exhibits of very great interest, designed to illustrate how the other half lives and how they might live. One can scarcely believe that public opinion would permit the retention of so-called air shafts, which are really well-holes closed at both ends, less than three feet wide, thirty feet long, and sixty feet high, with 52 windows opening thereon,—the sole source of light and air to these rooms. The rents for three-room apartments, two rooms opening solely upon this shaft, vary from \$10.50 to \$14 per month.

The Tenement House Committee offered prizes for the best plans treating plots of ground 50 feet, 75 feet, and 100 feet in frontage by 100 feet in depth. More than 250 plans were submitted under these various classes; and those awarded first, second, and third place showed very great improvements in tenement-house architecture. The jury, in making awards, was careful to consider commercial as well as sanitary aspects. The committee also offered a special prize for a plan suitable to the typical New York City lot, 25 by 100 feet. Curiously enough, a Frenchman, who had never seen New York, won this prize.

What should be the relation of the State or the municipality to the tenement-house problem?

1. I think Commissions of Inquiry, composed of persons having expert knowledge, should review periodically,—at least as frequently as every ten years,—and report upon tenement-house conditions, in a particular locality. The matter is one of such grave social import that it should be kept continually before the public. Sometimes not very much is accomplished from the reports of such bodies, but publicity is always one of the most effective weapons in fighting an evil. Some desirable measures are sure to result; and if as much as ought to be done is not accomplished, the fault must lie with public sentiment. Something useful has followed the report of every tenement-house commission appointed for New York City.

2. The State should provide a well-conceived tenement-house sanitary and building code for general application to large municipalities. The same structural disadvantages may not exist in Buffalo tenements, for example, as in the New York double-decker; but herding obtains in the tenement houses of both of these cities. A tenement-house code must carefully limit danger from fire, and must require ample safeguards for health and morals. If

it be said that such regulations might prevent the building of tenements in moderate-sized cities, I answer, so much the better. Even the best of tenements can never offer as true a development to home life as an individual house.

A tenement code should provide for the periodical inspection of tenements, in addition to visitation upon complaints. Such inspection should be conducted by a numerous and efficient corps of sanitary police, and the force should always be large enough to permit frequent night inspection with a view to prevent overcrowding. Wherever overcrowding is found customary, houses should be ticketed, as in Glasgow. This enlightened municipality maintains a system of night inspection for ticketed houses, which results in prosecution for overcrowding when the legal number of inmates is exceeded. The system was originally applied during an outbreak of typhus fever, and its extension still follows the discoveries of the epidemic inspector. The better class of tenants avoid ticketed tenements and even their neighborhoods. Consequently, landlords are always warned before tickets are put up in fresh localities, so that they may save the reputation of their property by getting rid of tenants responsible for overcrowding. Overcrowding should be made an offence involving exemplary punishment of the offender. Owners of houses sheltering six families or more ought also to be obliged to maintain a janitor on the premises.

The power to close summarily houses unfit for human habitation should be accorded after mailing a notice to the proprietor or agent at his last known address and posting a warning upon the house itself not less than twenty-four hours before ordering vacation. To make this regulation more effective, there should be kept a special register in which all tenement-house owners should be obliged to enter their own names and addresses or those of their responsible agents, under an appropriate penalty. It has

been suggested even that a special license should be required of an owner of tenement houses on the ground that under existing conditions he is likely to be the purveyor of a commodity detrimental to life and health, not only to the particular inhabitants of the house, but to those living in the neighborhood. If the license fee were even moderate in size, a considerable revenue would be created in some cities which might be applied to more adequate inspection.

A well-conceived sanitary and building code should require at least one bath-tub or shower-bath to serve at most twelve families, in a separate apartment especially designed, and to which all tenants should have access. The notion that the majority of working people do not wish to be clean, and would not take advantage of bathing facilities if they had them, is based upon an imperfect knowledge of the character of the people living in tenement houses. Owners of model tenements amply testify to the frequent use of bathing accommodations, and the reports of municipalities and private associations which have provided public baths furnish similar evidence. The Tenement House Committee of 1894 found in their investigation that, out of a total population of 255,033 included in their inspection, only 806 persons had access to bath-rooms in the houses in which they lived; and at that time there was not a public bath in New York. The committee very properly say that the preservation of health, the prevention of disease, and the curing of disease are seriously affected by this state of affairs.

3. A proper tenement-house building code should provide that light shafts be not less than six feet wide where the court is thirty feet in length, and the width should be increased at least one foot for each additional five feet of length. This should be a minimum requirement, prescribed simply as a concession to the custom of dividing up city lots into 25 feet frontages and 100 feet in depth.

4. Every State should pass a law permitting municipalities to expropriate irremediably unsanitary houses. There is no cure for cancer but the knife; and so the slum can be eradicated in no other way than by uprooting it, stock and branch. American States have not until recently dealt with the slum question in radical fashion, as they do in England. The writer was insistent upon urging the fundamental importance of a law of this kind before the Tenement House Committee of 1894. The commission later succeeded in securing the passage of an enactment based upon English legislation and experience.* In condemnation proceedings for small parks the State should authorize the municipality to proceed along the lines suggested by Mr. Stokes, to which attention has been already called.

5. If municipalities are endowed with such powers, there would seem to be no necessity for embarking upon the policy of municipal building and ownership of model tenement houses. The policy of certain English and Scotch cities in this regard seems to have been misunderstood.

* The present statute in New York provides for condemnation by the Board of Health, with a provision for compensation to the owners. In the condemnation proceedings, "evidence shall be receivable to prove:—

"1. That the rental of the building was enhanced by reason of the same being used for illegal purposes or being so overcrowded as to be dangerous or injurious to the health of the inmates; or

"2. That the building is in a state of defective sanitation, or is not in reasonably good repair; or

"3. That the building is unfit and not reasonably capable of being made fit for human habitation; and, if the commissioners are satisfied by such evidence, then the compensation—

"(a) Shall, in the first case, so far as it is based on rental, be based on the rental of the building, as distinct from the ground rent which would have been obtainable if the building was occupied for legal purposes, and only by the number of persons whom the building was, under all the circumstances of the case, fitted to accommodate without such overcrowding as is dangerous or injurious to the health of the inmates; and

"(b) Shall in the second case be the amount estimated as the value of the building if it had been put into a sanitary condition or into reasonably good repair, after deducting the estimated expense of putting it into such condition of repair; and

"(c) Shall in the third case be the value of the materials of the building."

At best, they did not intend to go farther than "making a demonstration"; but in this country it is to be feared that a demonstration would not afford a wise example. Municipal regulation, not municipal ownership, is the best watchword for American policy.

Can the tenement-house problem be solved by ordinary economic effort, safeguarded by a proper sanitary and building code? Upon the answer to this question depends the social welfare of enormous masses of city dwellers to-day and of myriads to come. The New York Tenement House Committee of 1894 found that in New York City the average profit realized by tenement-house owners was from 8 to 10 per cent. on the value of the equity. The accuracy of this estimate has been challenged; but correct figures cannot, I think, be much below 8 per cent. Substantially built and comfortably arranged model tenements cannot in New York, and probably will not in other large cities, yield as high a return. But what is lacking in the yearly rate is more than made up by greater regularity, safety, and longer continuance of the return. Under the principle of competition, good dwellings naturally receive the preference, and, when well built, will of course last longer. Therefore, 5 per cent. on model tenements should be considered fully equal to 7 or 8 per cent. upon the average New York tenement house. A commercial profit is being earned to-day and has been earned for years by model tenements in prominent American and foreign cities. The proof of this statement was given in my report made a few years ago to the United States Department of Labor. A list was there given of forty-nine European and American enterprises, all in cities of over 100,000 inhabitants, some commercial, some semi-philanthropic. The rates of dividend and net profit showed that the successful enterprises constitute 88 per cent.; 6 per cent. of the enterprises earned a savings-

bank rate of interest, and only the remaining 6 per cent. failed to do so well. Provision for light and ventilation, far in excess of legal requirements, has almost uniformly been made, only from 50 to 65 per cent. of the plots of ground being covered with buildings. The construction has always been durable; while the rents, as a general rule, are slightly lower than for fairly similar accommodations in the neighborhood.

Practical housing reform in the United States is now best exemplified by the City and Suburban Homes Company of New York, organized in 1896 with the object of offering to capital a safe investment and at the same time supplying to wage-earners wholesome homes at current rates. The broad, underlying principle on which the Company is founded is that the housing problem can only be solved by economic methods. Philanthropy is powerless to do much, because the field is altogether too vast. But there is a middle ground between pure philanthropy and pure business. We may call it *investment philanthropy*; that is, a philanthropy made seductive by co-ordination with a reasonable commercial dividend.

The second characteristic of this company is popularity, using the word "popular" in its generic signification. It desires to place within the reach of all who prefer, other things being equal, to invest their means for useful ends, a sound security. Particularly, the savings of the masses ought to be utilized more than they are at present, for their direct benefit. Accordingly, the company's shares are fixed at the low denomination of \$10 each in order to attract people of modest means. By establishing a clientage recruited from the thrifty masses as well as the large-hearted rich, the company's operations ought to be extended without practical limit.

The third principle is the differentiation of the company's efforts to meet the needs of different classes of wage-earners. The thrifty artisan who has laid by a

little, and whose stipend is sufficient to meet monthly instalment payments of modest proportions, can, in twenty years or less, become the owner of a comfortable home. The less fortunate wage-earners, men or women, can find in the model tenements the maximum of comfort, privacy, and sanitary advantage obtainable for a minimum of rent.

The model tenement buildings of the company have already been briefly noticed. The financial experience of the company with these buildings has been very satisfactory. 5 per cent. and a modest surplus have been earned, and losses from vacancies and irrecoverable arrears together have been less than 5 per cent. Owing to the migratory habits of New York's tenement population, the loss from vacancies has been much larger than the loss from irrecoverable arrears.

There need be no comment on the great value of popular suburban proprietorship from the standpoint of social stability. Every man undertaking it is distinctly helped to a far higher degree than he could be in the best class of model tenements. He becomes reflective, careful, prudent, wedded to order and rational conservatism, and usually turns a deaf ear to specious "isms." Suburban proprietorship is a field well worth cultivating. When it can be attained, with fair economic returns to the investor, through moderate monthly payment by the purchaser, a work of splendid social beneficence is put in operation.

The City and Suburban Homes Company, as its name implies, has addressed itself to this phase of the housing problem. It is building up a unique and attractive settlement at Homewood, in the Borough of Brooklyn, forty minutes distant from the New York end of the Brooklyn bridge. Here the average man, with earnings of \$1,000 or \$1,500 per year, can secure ownership of a house by monthly payments, little, if at all, in excess of the rental he pays for the usual city apartment. A payment of 10 per cent. on the purchase price is required, as well as a

policy of life insurance; and there is no difficulty in providing equitably for the contingencies of failing health or changed plans in life. Financially, the result is ownership virtually without added expense to the occupier. On the ethical side, no one can question that the children of such a family will have been reared in a healthier and saner environment than if the parents had remained tenants of the ordinary seven-room apartment in the crowded quarters of the city.

What is to become of the tenement houses already built, not irremediably insanitary in their construction, and measuring up to standards which are being outlived? I think the best method here is to develop the rent-collecting system so successfully established and operated by Miss Octavia Hill and her associates in London. It is possible, by good management and careful attention to repairs, to make such houses fairly livable places for the poorer element amongst a city's population. Miss Hill's maxim has always been that the inhabitants and their surroundings must be improved together. This is essentially sound, and experience has shown that none are better able to bring about desired results than women in whom special training supplements good business capacity and straightforward sympathy.

Model lodging-houses can best be utilized to take care of the homeless of both sexes. The demonstrations of commercial success in this field made by Lord Rowton in London, Mr. Robert Burns in Glasgow, and Mr. D. O. Mills in New York, besides those in several English and Scotch municipalities, cause one to wonder that this promising department of economic and humanitarian effort is not more largely cultivated.

Why is it, since improved housing pays, that there is still such large need for its provision? To my mind, there are three principal reasons:—

First, the real nature of the housing problem and its

direct bearing upon civic welfare are only just being appreciated. Many of the earliest efforts at amelioration were philanthropic in origin, and hence the problem became classified in the field of charity or philanthropy rather than in the field of economics and business.

Secondly, the knowledge that, though this be Christian business, it is still remunerative business, is only beginning to spread.

Thirdly, the tenement-house business in the past has been under the shadow of disrepute; and its conduct has been left very largely to persons who have widened to the utmost the horizon of exploitation. The saloon-keeper, the sweater, the *padrone*, the irresponsible speculator, have figured so largely in tenement building and ownership simply because the financier and the Christian man of business have not felt it entirely respectable to become tenement landlords.

With the advent of corporation activities in our great cities, following in the lead of London, with better understanding of the economic opportunity which awaits investment, and with the growing sense of social obligation to use a part of one's means in doing good while adding to the store, the future seems bright with promise.

E. R. L. GOULD.

THE CURRENCY ACT OF 1900.

THE act of March 13, 1900, "to define and fix the standard of value, to maintain the parity of all forms of money issued or coined by the United States, and for other purposes," opens a new stage in the monetary history of the United States. For the first time since the Civil War an attempt is made to "fix and define,"—to enter on a policy deliberately chosen. It remains to be seen, it is true, whether this attempt will be successful. The legislation of the present year may prove no more definitive than the series of compromises that have preceded it. Yet some things have been accomplished; and in any case the act of 1900 will not only remain on the statute-book for years,—very likely for many years,—but will be the starting-point for any legislation in the future. The changes which it makes and the system which it establishes therefore deserve attentive consideration.

The train of events which caused the currency of the United States to be for so many years in an unsettled condition has been sketched elsewhere in these columns by a master's hand.* It will suffice here to recapitulate once more what are the constituent elements in the amorphous mass of money with which Congress has been compelled to deal. It includes: (1) the United States notes, "greenbacks," "legal tenders," dating from the Civil War, and fixed, after a long and checkered legislative history, at the precise sum which happened to be outstanding in May, 1878,—\$346,681,016. (2) The silver currency,—silver dollars, and certificates representing them,—dating from the act of February, 1878, under which successive instalments were put forth, and were

* *The Safety of the Legal Tender Paper*, by Charles F. Dunbar, in this Journal, vol. xi. p. 323 (April, 1897).

further added to, in cumbrous fashion, by the act of 1890. The amount of these outstanding at the beginning of the present year (January 1, 1900) was 476.2 millions,—395 millions in the form of silver certificates, 81.2 in the form of dollars. (3) The Treasury notes of 1890, issued in that year in purchase of silver, precisely like the United States notes in being legal tender paper, but, unlike them, subject to gradual conversion into silver currency (dollars and certificates) under the peculiar provisions of the act of 1890, as amended in 1898.* The amount of these outstanding on January 1 was 89 millions. (4) The national bank notes, payable necessarily in any form of legal tender money which the banks may choose to use,—whether gold coin, silver coin, or legal tender notes,—and thus depending for their strength on the weakest part in the chain of the several currency issues put forth by the government. Their amount at the opening of the year was 246.3 millions.

Evidently, the effect of this system, or lack of system, was to make the maintenance of the gold basis for the whole volume dependent on the maintenance of that basis for two classes of legal tender notes. The bank-notes stand or fall with the legal tender money in which they are payable. The silver currency presents a simple though quantitatively imposing example of the so-called “limping standard.” These dollars and certificates, though intrinsically worth less than half their face value, yet maintain that face value so long as their volume is safely below the total which finds ready use in the community at the level of prices brought about by the conditions of international trade. The legal tender notes, if they stood alone, might conceivably be in an analogous condition of “limping” steadiness. But, standing as they do side by side with a very large quantity of other fiduciary money, it has been more than a possibility that redemption should

* See the notes in this Journal, vol. x. p. 350 (April, 1896) and vol. xiii. p. 113 (October, 1898).

be actually called for, and, failing redemption, the rest of the currency would go up and down according to the degree of consequent depreciation of these notes.

The convertibility of the legal tender paper at the United States Treasury, which thus is the corner-stone of the existing currency structure, has been made insecure since the resumption of specie payments by two sets of causes. On the one hand, there has never been explicit legislation providing for redemption in gold. From the Public Credit Act of 1869 and the Resumption Act of 1875 down to the present time the word "coin" has been steadily used in the statutes; and, however clear it was that "coin" meant gold, especially before 1878, and however obviously the honor of the country was pledged for payment in gold, the strict letter of the law permitted the Treasury at its discretion to pay either in gold or in silver coin. Quite as serious, in the turn which events happened to take, was the second cause of instability,—the failure to provide any separate funds by which the Treasury could meet a demand for redemption. Its ability to do so rested on its general resources, and on the maintenance of a steady supply of specie derived either from loans or from an excess of receipts over expenditure. Any fiscal drain on its resources, whether from diminished revenues or enlarged expenditures, threatened the stock of gold which had been accumulated at the time of resumption in 1879, but which had never been set aside specifically for the purposes of continuing redemption.

This curious confusion between the original fiscal duties of the independent Treasury and the monetary duties newly imposed on it since the Civil War was made the more dangerous by the great irregularities alike in the receipts and the expenditures of the federal government. The receipts have been derived always largely, and for many years preponderantly, from customs duties, whose yield fluctuates rapidly and unpredictably with the varia-

tions in the industrial activity of the country. The expenditures, controlled by the separate committees of the House and Senate which frame the appropriation bills, vary according to the political complications of the moment, the temper of leading men, the pressure from one or another section of the community for public disbursements. The Treasury must confront the possibility, nay, the probability, of alternate periods of plethora and emptiness; and its ability to maintain the redemption of legal tender notes was thus inevitably subject to great dangers and uncertainties,—dangers of whose reality the near approach to collapse in the years 1894–96 gave impressive evidence.

This indefensible state of things was the result, not of premeditated policy, but of the complete absence of such a policy. It was the outcome of a succession of compromises and makeshifts; and it was allowed to stand for so long a period mainly because of the even balance of the contending sections in the community, which demanded, the one a gold basis, the other a silver basis, for the whole mass of the currency. In 1896 the abrupt identification of the Democratic party with the silver section caused the Republican party, which for a generation had tried to face both ways, to identify itself, in its own despite, with the gold section. Its victory at the polls in that year, and the control of both Houses of Congress which it secured,—not at once, but with the opening of the present Congress,—led finally to the enactment of the new Currency Act. Strong pressure from the business community, through the movement initiated by the Indianapolis Monetary Convention of 1897–98, was needed to bring the leaders of the dominant party to undertake any single-minded and well-defined policy. Even with pressure so strong and with conditions so opportune the temporizing habit still showed its strong hold, especially with certain wary senators, veterans in the art of evading an issue. Hence the act,

while it goes farther than Congress has gone for many a day, is far from being a well-rounded and consistent measure, as will appear from an examination of its provisions in detail.

On one subject, indeed, the language is explicit. The first section provides that the gold dollar shall be "the standard unit of value," and makes it the duty of the Secretary of the Treasury to maintain all forms of money "at a parity" with this standard. This, to be sure, is no more than a declaration, whose efficacy depends on the nature of the legislation provided for upholding the standard. Much more important, as a legislative command framed in precise terms, is the provision with which the second section opens: that United States notes and Treasury notes, when presented for redemption, shall be redeemed in gold. Under the terms of previous legislation the Secretary of the Treasury had the right to redeem, at his discretion, in either kind of coin. The act of 1890 had indeed contained a phrase which might be construed as identical with that in the opening section of this year's measure,—that it is "the established policy of the United States to maintain the two metals on a parity upon the present legal ratio." But the discretion then left with the Secretary of the Treasury as to the mode in which the "established policy" was to be carried out made redemption in silver an obvious possibility. Hereafter no Secretary will have discretion on this point. The legal tender paper is redeemable in gold, and in gold only.

The bill passed by the House had extended the policy of unambiguous promise still further by providing that all interest-bearing obligations of the United States should be payable in gold. This pledge, which would seem to be a natural corollary from the other, was dropped by the Senate. In later sections of the act, inserted by the Senate, it is prescribed that certain new bonds (of which more will be said presently) shall be payable, principal

and interest, in gold; but the bonds now outstanding are left, even more clearly than before, payable under the strict letter of the law in either metal. No respectable reason can be adduced for treating differently the two classes of debts. If there was before a doubt as to the nature of the obligation on the non-interest bearing debt, that doubt attached equally to the interest-bearing debt and equally needed to be dissipated. It is not probable that the ambiguity thus retained will prove of serious consequence; though, in view of all the varied possibilities of the future, it is by no means impossible that it should become so. Certainly, its deliberate retention as to the bonds now outstanding does not redound to the country's honor.

Proposals have sometimes been made (thus, in the plan of legislation devised by the monetary commission of the Indianapolis Convention) for the redemption in gold of the silver currency also,—a change which would make this, like the legal tender paper, a direct promise to pay in gold. Neither the House bill nor the Senate bill provided for such redemption, and the act leaves the silver to stand on its own short leg as before. Its legal tender quality remains as it had been; that is, the coined dollars are legal tender without limit, while the certificates are receivable for public dues and available for national banks as part of their lawful reserves. In this regard the wise policy was followed. The silver currency is better left by itself, presenting its own problems and to be dealt with on its own merits. For the present at least, and perhaps indefinitely, it may be left without danger; and, at all events, it should not be allowed to complicate and confuse the paper-money question by outright promise to redeem the silver money in the other metal.

The crucial question in the pending legislation was the precise provision for the promised redemption in gold of

the legal tender paper. Assuming that such paper was to remain, whether temporarily or indefinitely, a constituent part of the circulating medium, the natural mode of insuring its unfailing exchange for gold was the establishment of an issue department which should automatically give gold for notes, and therefore hold the notes unless gold should again be deposited against their reissue, thus completely divorcing this part of the Treasury from its admittedly harmful connection with the receipt and disbursement of current revenues. The Issue Department of the Bank of England presented a familiar example of an independent and automatic bureau of this kind,—an example perhaps not likely to be cited by those of chauvinistic spirit, but none the less suggestive as showing the possibilities of stability under such a system. Something of the sort is now established in the United States; yet with such complications, and with so much of discretionary power at the Treasury, as to leave, after all, little impression of sharply defined separation, and, what is much more important, to establish no habit or tradition of a self-acting monetary system.

By section 4 there are established in the office of the Treasurer* two divisions, to be known as the division of issue and the division of redemption; and to these are transferred "all records and accounts relating to the issue and redemption of United States notes, gold certificates, silver certificates, and currency certificates." So much is merely a book-keeping change, serving to set forth more clearly the various resources and obligations of the Treasury. But it is further provided that among these accounts shall figure the "reserve fund" for the redemption of the legal tender paper, which, like the other funds

*The Treasurer is the custodian of the cash of the government; the Secretary of the Treasury, the administrative head of the whole department.

To illustrate the new regulations, I have printed in the Appendix two statements of the Treasury's condition, for March 13 and 14,—the last day under the old régime and the first under the new.

represented in the several accounts, is to be "held as a trust fund." That reserve fund is created and specifically defined in section two, where the declaration of trust again appears in the provision that the fund "shall be used for such redemption purposes only." The Secretary of the Treasury is to constitute it by setting aside 150 million of gold coin and bullion,—not, indeed, setting it aside physically, but charging so much of the gold he has on hand to the reserve fund. Here we have something like an issue department. We might expect that thereafter the situation would be simple, the new department, or account, serving to hold fast any notes redeemed, and reissuing them, if at all, only against a later redeposit of gold. But this simple and straightforward mechanism is not adopted. Instead, we have a series of elaborate regulations, which once again interlace the new account with the other Treasury operations. The further provisions of this section of the act (section 2) call for constant transfers to and fro between the new reserve fund and the general fund, anxiously avoid any accumulation or putting aside of redeemed notes, virtually compel their reinjection into the currency, and, finally, look to a real replenishment of the gold supply from the sale of bonds only as a last and extreme resort.

The details of these provisions deserve careful examination. "Whenever and as often" as notes are redeemed, it is made the duty of the Secretary of the Treasury to resort to three ways of using these redeemed notes "to restore and maintain such reserve fund." (1) He must exchange the notes for any gold coin in the "general fund." This general fund is simply the cash which happens to be on hand in the course of the Treasury's ordinary fiscal operations. If the cash is in excess of current needs, and if the surplus on hand exists in the form of gold coin (as at the present juncture happens to be), a resource for strengthening the reserve fund is here available. But the

resort to this device clearly causes the surplus in the general fund to take the form of notes rather than of gold; and, since a permanent and continuing surplus is more than improbable, we may be sure that sooner or later the transferred notes will be paid out. Under what we may suppose to be normal conditions, when revenues simply balance expenditures, the operation must cause the redeemed notes to be returned to circulation with but a short interval of temporary housing in the general fund. (2) The second use which the Secretary of the Treasury must make of redeemed notes even more obviously and unfailingly returns them to circulation: "by accepting deposits of gold coin at the Treasury or at any sub-treasury in exchange for the notes so redeemed." Such deposits have been habitually made for years, where paper is desired for convenience of use by persons having gold on their hands; and a continuance of this practice is looked to as a means of replenishing the reserve fund. (3) Finally, there is a last method, which on its face suggests an ostrich-like process of dodging. The Secretary is to procure gold "by the use of said notes in accordance with section 3700 of the Revised Statutes." That section authorizes the "purchase" by the Secretary of coin with notes, "at such rates and upon such terms as he may deem most advantageous." It was a re-enactment, at the time of the Revision (1873-74), when specie was still at a premium, of an act passed in March, 1862, within a month after the first issue of legal tender notes. On its face the continued resort to any operation of this kind, in an act passed long after the resumption of specie payments and designed to strengthen resumption beyond peradventure, seems simply absurd, the Treasury being supposed to buy gold with notes at the very time when it is called on to pay these same notes in gold.*

* This provision, and indeed the enumeration of all three of these compulsory exchange operations, was inserted in the Senate bill. The House bill simply provided that the Secretary *might* transfer to the reserve fund any

These provisions, easily misunderstood by the uninitiated, and on their face inconsistent with a system of automatic redemption, are probably the outcome of a variety of causes. The accident of a full and overflowing Treasury played its part. Had there not happened to be a very large "general fund" at the time when Congress was considering the measure, the interchanges with this other side of the Treasury would have suggested themselves less temptingly. More influential, probably, was the unquestionable fact that frequently and, indeed, commonly, in prosperous and easy-going times, paper has been presented for redemption not from any distrust of the security of the paper or from inability to obtain gold elsewhere, but from the simple convenience of exchange at the well-equipped counters of the Treasury; while the reverse process, of presenting gold for similar convenience of exchange into paper, is equally common. Habits of this sort are the result of the long persistence of a régime of paper for all every-day transactions,—a régime created before the Civil War by the failure to prohibit bank-notes of small denominations, and maintained necessarily during the long period of suspension of specie payments. It is often assumed that Americans have a rooted dislike to handling gold coin; and this state of habit has been

available resources in the general fund. Senator Allison, who seems to have been among those responsible for its insertion,—see the remarks of Senator Aldrich in the *Congressional Record*, p. 2456,—thus explained the possible use of the third device:—

"The object of that is to give the Secretary of the Treasury a little latitude in times of distress or panic, so that, if need be, if he find gold in Chicago or in San Francisco, and not gold precisely where he needs it, he can exchange these greenbacks by paying the express charges of the greenbacks to San Francisco or to Chicago and the express charges of the gold in return, which, you will see, is a small premium. It is a small premium, but no Secretary of the Treasury will abuse this power. However, it is an important power that he shall hold in his hands, in order that he may be able in critical times to pay the necessary expenses in the nature of a small premium rather than to use the power given to him to sell bonds." *Congressional Record*, p. 1838.

Surely, a strange proceeding: a great nation, in time of "distress or panic," is supposed to scrape together gold by forcing out its own discredited promises to pay gold.

adduced as a ground for the system of interchanges established, or rather confirmed, by the new act. The strong probability is that the ways of Americans and the shape of their purses would adapt themselves to gold coin as easily as do those of other civilized countries; and, in any case, if it were thought inadvisable to experiment towards such a change, the familiar device of issuing gold certificates against deposits of gold would have met every possible need of "convenience." But the sacro-sanct quality which attaches to the greenbacks in some quarters prevented this simple and consistent step from being taken. The act expressly provides that "United States notes, when redeemed in accordance with the provisions of this section, *shall be reissued*, but shall be held in the reserve fund until exchanged for gold, as herein provided." In other words, they are to be treated, as they have been treated ever since the resumption of specie payments, not as a debt to be paid and disposed of, but as a form of money, inflexible in quantity, which under the new legislation may be temporarily in the reserve fund or in the general fund of the Treasury, but is sooner or later to play its part once more in the circulating medium.

All the devices described in the preceding paragraphs are compulsory on the Secretary of the Treasury until 50 millions of the original 150 millions of gold are gone from the reserve fund. So long as gold can be scraped up elsewhere, by transfer from the general fund or by exchange with the outside world, the redeemed notes are to be held in the reserve fund only for a moment. When these devices are no longer available, the notes begin to be impounded. The reserve fund may never exceed 150 millions in all, and, as will be pointed out in a moment, the notes held in it may not exceed 50 millions; but within these limits it may consist partly of gold and partly of redeemed notes.

The stage of energetic replenishment of the reserve

fund is not reached until the gold in it shall fall below 100 millions. Then the Secretary of the Treasury must sell bonds,* and thereby procure gold. But the gold thus got is not to be turned automatically into the reserve fund. It "shall first be covered into the general fund of the Treasury, and then exchanged for an equal amount of notes redeemed." The effect of this requirement must be to cause the reserve fund, which previously would have consisted of 100 millions of gold and 50 millions of paper, to be suddenly made up again of 150 millions of gold, the paper being transferred as suddenly to the general fund, and there held again as cash. Thereafter these notes may be used in exchange for gold (once more!) or to purchase bonds or "for any lawful purpose." The only restriction is that "they shall not be used to meet deficiencies in the current revenues." This proviso is expected to prevent the reappearance of the "endless chain." So long as there is a "deficiency in the current revenues," any notes transferred from the reserve fund into the general fund in exchange for bond-bought gold are to be impounded in the general fund, and there held as "cash in the Treasury."

Quite apart from the question whether Congress is likely to leave redeemed notes in the general fund in case of a prolonged deficiency,—of which something will be said presently,—there is here a curious assumption that a deficiency in the revenue is something that discloses itself immediately and unmistakably. Obviously, however, it is a matter for judgment, if not for guess, whether current revenues are now redundant or insufficient, depending on contingent and uncertain expenses as well as on those accrued, and on future estimated revenues as well as on those already received. Let the experience of 1873 be recalled. Then Secretary Richard-

* The bonds to be used for redemption purposes are different from those authorized by later sections of the act. They may bear interest up to 3 per cent., and are redeemable at pleasure after one year. Like the other new bonds, they are payable, principal and interest, in gold.

son, at the height of the great crisis, poured out, and in vain at that, a quantity of notes he had on hand, in what is now dubbed the "general fund" of the Treasury; thereafter found that his revenues fell off, and failed to replenish his fund; and finally resorted (with doubtful legal authority) to an issue of still other notes, supposed to have been redeemed, paid off, and non-existent, thus meeting the real deficit which resulted unexpectedly, though not unnaturally, from his dissipation of a supposedly available "general fund." * The present restriction against using the redeemed notes "to meet deficiencies in the current revenues" virtually serves only to put a discretionary power in the hands of the Secretary, and depends for its effect on the wisdom, personal and political prestige, and ability to withstand inevitable pressure, possessed by the person who fills that trying office for the time being.

Surveying the new Treasury system, as a whole, we need not hesitate to admit that, so long as this legislation stands, it is strong enough, assuring, even though by a cumbrous machinery, the maintenance of the gold standard. Much, indeed, is left to the discretion of the Secretary of the Treasury. Contingencies may be imagined in which the elaborate mechanism would be put to severe trial, and the government and the business community involved in difficulties calling for the highest qualities in that responsible post. But, notwithstanding the juggling which is obligatory on the Treasury in the early stages of any drain, the means for meeting it manfully are available and, indeed, in the end obligatory.

In a democratic community, however, legislative details are much less decisive than established traditions and principles. So long as this legislation stands, the currency will be securely on the gold basis; but is it likely to stand?

Looking at the statement of the Treasury's condition as

* See the reference to this operation on p. 229 of Professor Dunbar's paper as cited above; and compare the *Report on the Finances*, 1873, pp. xi-xv.

it is framed in conformity with the new statute, the first item we find, standing conspicuously at the head, is the "reserve fund" of gold coin and bullion to the amount of 150 millions. Here is a huge asset, available for any Congress which finds it troublesome to pay as it goes. If we had a strong tradition that the reserve fund was inviolable, we might feel confident that it would not be touched. If it were the property of an independent corporation,—such as are the great Banks of England, Germany, and France, and such as were the two former Banks of the United States,—it would be unmistakeably a part of the monetary system alone, and in no danger of being regarded as a fiscal resource. But, as it stands, a Treasury asset merely set aside for a specific purpose by legislation subject to amendment by the appropriation bills of any session, can we feel confident that it will remain intact? Evidently, the establishment of a tradition of inviolability is impeded by those constant transfers and swaps between reserve fund and general fund which the act makes obligatory. Gold and notes go from one to the other interchangeably. Sometimes the reserve fund itself will be made up partly of gold, partly of notes. For years, too, the fund may seem idle and useless, serving no apparent purpose, and locking up so much of available cash. No doubt in prosperous times it may be left there with indifference. But let the years of depression and of straightened revenues come,—as come they must,—and we may be sure that a strong party in the national legislature will be disposed to draw on this convenient resource. The friction of our cumbrous legislative machinery may give the present arrangement, like any existing statute, a certain stability from the mere difficulty of substituting anything else; but this is a poor safeguard against continuing temptation. The new system contains hardly less elements of weakness than did the Resumption Act itself. Its permanent effectiveness depends not

on settled principle, but on the fragile safeguard of unceasing vigilance against the attacks which it invites.

But more: not only does the reserve fund in itself invite attack as an easy fiscal resource, but the working of the general fund under the independent Treasury system habituates the community to demands on the public purse for relief in times of stress. The government, acting as custodian for its own cash, inevitably absorbs, when its revenue is redundant, a large part of the circulating medium. The excess so stored in its coffers must be ejected when it passes the bounds of endurance: hence the spasmodic purchases of bonds, deposits in national banks, search for possible new ways of expenditure, and all the devices that are suggested in times of plethora for getting the cash out of the Treasury. One such device, presently to be considered, is notable in this very statute. Hence, too, the habit in the financial community of looking to Washington for relief in times not only of serious crisis, but of commercial stress or even of "tight money" in the speculative market. Frequently enough the independent Treasury system is in reality, if not the prime cause, at least a cause contributory to distress; and, naturally, it is called on for relief in every case, even though other and deeper causes are at work, and the remedy of pouring out its cash is likely to be of no avail. True, under the legislation now enacted, nothing in the reserve fund of the Treasury may be paid out, even in the extremest crisis, by a Secretary who conforms scrupulously to the requirements of law: only what he has in the general fund, large or small, is at his disposal. But are these, once more, the conditions promising for stability? Is the line between trust fund and general fund—at best obscured by the act itself—likely to be always clearly distinguished by the business public and by the legislators?

Demands for relief at the hands of the Treasury, thus engendered by the habits of half a century, must be ex-

pected not only in the brief weeks of a crisis, but in the longer periods of depression and stagnation that follow. There will always be a strong party in our community that looks in such periods to plentiful money as the remedy. A great mass of cash, perhaps all gold, perhaps partly gold and paper, stored up in the public vaults, must appear to a multitude of persons an easy means of vivifying industry, of starting the wheels of prosperity, and what-not enticing phrases will be current. There is an obvious distinction between a call for the additional cash which sometimes is really needed in the course of a financial crisis, and more often is simply supposed to be needed, and a call for more money as the sovereign panacea in bad times. But the every-day man and the every-day legislator will be easily confused between them; and in any Congress some transient wave of popular uneasiness or discontent—especially when re-enforced by the fiscal pressure likely to be felt at just such periods—may undermine the structure which is now set up.

To sum up: the conspicuous amassing of a great hoard of cash, likely to be year after year of no apparent utility; the difficulty of establishing with the general public and among the ever-shifting legislators the traditions of an inviolable fund; the constant transfers from reserve fund to general fund and *vice versa*, still further obscuring the principle of an independent and automatic reserve; the habit of looking to the government for relief, engendered by the system of an independent treasury; the certainty of a perennial crop of agitators and legislators who will urge a plentiful outpouring of money as the one remedy in times of depression; the constant resort to compromise in settling disputed questions, inevitable under Congressional and Parliamentary government, and conspicuously illustrated by the history of currency legislation for the last thirty-five years,—these are undeniable menaces to the permanent maintenance of the new system. It lacks

above all things the simplicity and single-mindedness necessary for the planting of a tradition, for the settlement of a principle. What its future may be remains to be seen. In fair weather, it will go its way easily enough; but how will it withstand the shocks of storm?

We may turn now to some of the other provisions of the act.

The Treasury notes of 1890, the luckless and unfriended progeny of the union between silverites and protectionists in that year, are at last definitively disposed of. On their face they are legal tender notes, yet in origin they are based on silver purchases, and they have always been difficult to classify, standing somewhere between the paper money proper and the silver currency. It is now provided that they shall be relegated to the latter class once for all. The war revenue act of 1898 had already enacted that all the silver bullion purchased by the government under the act of 1890 should be converted gradually into silver dollars, at the rate of $1\frac{1}{2}$ million dollars per month. It is now required, in section 5 of the new act, that, as these notes are received by the Treasury in any way,—whether in payment of taxes or by way of presentation for redemption,—they shall be cancelled to the amount of $1\frac{1}{2}$ millions a month, silver certificates taking their place to that extent. Gradually they will thus disappear, and the only direct obligations against the reserve fund will be the United States notes proper,—the still outstanding issues of the Civil War. The silver bullion held in the Treasury from the purchases of 1890 will suffice to coin more silver dollars than the Treasury notes outstanding from that operation; and, if all of it were coined into dollars, the total of the silver currency in the form of dollars and certificates would be increased by more than the amount of Treasury notes withdrawn. But section 8 gives the Secretary of the Treasury authority, at his dis-

cretion, to convert some of this bullion into subsidiary silver coins, cancelling Treasury notes for an equivalent amount; and by so much their conversion into dollars and certificates is lessened.

As to the national banking system, some noteworthy changes are made; yet, after all, none that alter the main outlines of the system as it stands, or are likely to bring any far-reaching changes in its actual working. Banks are allowed to issue notes up to the par value instead of 90 per cent. of the bonds deposited; the proviso being retained, however, that notes shall not exceed the market value of the bonds. They are also allowed to issue notes to the full amount of their paid-in capital instead of 90 per cent., as hitherto,—a privilege of which it is highly improbable that any appreciable number of banks will avail themselves. The tax on circulation is reduced from 1 per cent. a year to $\frac{1}{2}$ of 1 per cent., for such banks as deposit the new 2 per cent. bonds authorized by the act. Banks with a capital of not less than \$25,000 are permitted in places having a population of three thousand or less. A provision in the rechartering act of 1882, by which a bank had been prohibited from issuing new notes during a period of six months after any withdrawal of circulation on its part, is repealed. This restriction has made the national bank issues, inelastic at best, still more unresponsive to the needs of business. It never had any solid justification, and is well rid of.

The reduction in the tax on circulation, it will be noted, is conditional on the deposit of the particular bonds newly authorized in the act, bearing 2 per cent. interest, redeemable at pleasure thirty years after issue, and payable, principal and interest, in gold. The floating of such bonds in exchange for certain existing issues bearing a higher rate of interest is made possible by authorizing the payment to their holders of a cash bonus.* This refunding

* Not all the outstanding bonds may be exchanged for the new per cents. The exchangeable issues are noted below. The amounts outstanding on Feb-

operation serves a double purpose. It gets rid of some of the accumulated cash in the "general fund" of the Treasury, and, indeed, could not have been undertaken but for the presence of a heavy surplus. It also eases the conditions under which national bank notes may be issued, by enabling banks to secure bonds for circulation without locking up additional capital in the premium which was commanded by the securities to be exchanged. On the other hand, it has the disadvantage of depriving the government of the right of redeeming its debt for a period of thirty years. Hereafter the reduction of the debt, so far as these bonds are concerned,—and, indeed, for virtually all the bonds,—must proceed by purchase in the market; a process which not only involves bargaining and possible speculative manipulation, but causes an artificially high price of the securities which the government finds itself compelled to buy.

It would be idle to try to predict in detail the effects of these changes in the national banking system. Some immediate increase in circulation there will certainly be from the permission to issue up to the par (or market) value of bonds. Additional issues may be tempted by the easier conditions in other directions. Some new banks may be organized, with the minimum capital of \$25,000, in small places. But it is safe to say that the changes, whether their quantitative outcome be a little greater or less, will not radically change the national bank situation nor enable the system to adjust itself smoothly and ade-

quately, January 1, 1900, and the sums which their holders are entitled to receive on exchange, are also given.

	Outstanding February 1 (millions).	Premium payable for each \$1,000 exchanged.	Total premium payable if all outstanding bonds were exchanged (millions).
1. Four per cents., redeemable after 1907, (Issued in 1877-79.)	545.3	\$111.68	63.7
2. Five per cents., redeemable after 1904, (Issued in 1894.)	95.0	110.07	9.6
3. Three per cents., redeemable after 1908, (Issued in 1898.)	198.8	105.68	11.3

quately to the needs of the community. The requirement of the purchase and deposit of a 2 per cent. security will continue to prevent any considerable gain in circulation. That same requirement causes the operation of putting out circulation to depend still, not on the opportunities of the individual bank in its expanding or contracting business operations, but on the accident of apparent profit under the current price of bonds. The maintenance of the present mechanism for redemption, virtually at the Treasury alone, makes the contraction of excessive issues — if such there should be — conform but sluggishly and uncertainly to the general changes in the industrial activity of the community. In fine, there is still no real elasticity, whether for expansion or contraction. Nor is it to be expected that the privilege of establishing banks with the lowered minimum of capital in small places will be followed by any permeation of the rural districts with banking accommodations under the national system. The conditions of issue are still so hard that no more than a sporadic growth is to be looked for. And, so far as there will prove to be such a growth, it may be attended with serious dangers to the prestige of the national banking system as a whole. In the crisis of 1893, nothing was more striking than the wholesale failures of small State banks scattered through the central and Western States, — failures due to the inherent difficulty of securing good management and a proper distribution of risks with institutions conducted on so narrow a scale. Collapses of the same sort must be feared among small banks, whether State or national, when another crash comes.

Some changes are made in the denominations in which the several forms of money may be put forth. Silver certificates may be issued hereafter only in denominations of ten dollars and less (except for a leeway of 10 per cent. of the total volume, which the Secretary of the Treasury has discretion to print in larger denominations). United

States notes, on the other hand, are to be in denominations of ten dollars and upwards. National bank notes, as to which the previous restriction had been that none should be for less than five dollars, may hereafter be of that denomination, for any one bank, only up to one-third of its issues. They also must therefore be preponderantly for ten dollars and more. Gold certificates may be issued in denominations of twenty dollars and upwards, with the proviso that at least one-fourth in amount shall be for fifty dollars or less. The design of these regulations is to reduce the silver currency, not indeed to the position of a subsidiary currency, but to an analogous one,—that of an over-valued specie, limited in quantity, and circulating in comparatively small denominations. Such has been in the main its place hitherto, and will be more certainly and completely its place hereafter.

No great importance attaches to this confirmation and extension of an existing practice. The competition of the silver currency with the bank-notes, in the channels of circulation to which bank issues are chiefly confined, must indeed become somewhat more severe, especially in view of the swelling of the silver currency from the amalgamation with it of the bulk of the Treasury notes. But, as long as paper of one sort or another is the medium for the transactions of every-day exchange, it is of no great moment which form of it is used most largely in the smaller denominations. Countries whose paper money consists solely of bank-notes restrict the denominations of these with the design of compelling the use in every-day transactions of specie, and of securing by this permeation a broad and solid basis for the whole monetary system. But where, as in the United States under existing conditions, another form of fiduciary money fills these channels up at once, nothing substantial is gained by such changes as have now been made. If, indeed, the actual circulation of gold coin, say in the form of five-dollar pieces, were brought about,

something would be gained, both in the way of real solidity and in counteracting a widely diffused notion that gold is mysteriously scarce. But the great volume of the silver currency which is now definitively relegated to these channels makes such a change, welcome as it would be, highly improbable.

Taken as a whole, the act makes a step forward. It establishes the gold standard *eo nomine*,—a recognition of existing facts, and a declaration of principle for the future, in refreshing contrast with the evasive twaddle about “parity” so common during the last two decades. It reorganizes the Treasury Department in conformity with the requirements of the situation as created by the Resumption Act, with deliberate preparation for the redemption on demand of the obligations whose payment was undertaken by that earlier measure. It treats the national banks not as grasping and dangerous corporations, but as useful institutions deserving the fostering care of the legislature. On the other hand, the reorganization of the Treasury is on lines which invite attack and make resistance difficult; and the changes in banking legislation are not such as to make possible any considerable expansion of the national system or to enable it to render the community the full service of which it is capable. The act is likely to stand for some time. It may be that its salient feature—the establishment of government-issued convertible paper—will prove to be a permanent element in our currency system. But it is probable that further legislation, in the direction of greater security or of less, will be undertaken on the legal tender paper; and it is well-nigh certain that eventually Congress will have to consider once more the further remodelling of the national banking system.

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JUDICIAL DECISIONS ON STATUTES PROHIBITING COMBINATIONS AND TRUSTS.

THE American States have enacted, during the last ten years, a long series of statutes prohibiting industrial combinations, or so-called "trusts." Almost the first of these was the federal act of 1890, commonly known as the Sherman Anti-trust Law; and this has served as model for most of the laws of the several States. Twenty-seven States and Territories have passed such laws. They range from Maine to Florida and Texas, and from New York to California and Washington, through every section of the country, through every phase of political belief. There can be but one conclusion. The people of the country, through their representatives in Congress and in the State legislatures, have decided that great combinations of capital are prejudicial to public welfare.

All the statutes prohibit combinations, and make the persons engaged in them punishable by fine and imprisonment. Corporations are punishable by fine, by forfeiture of charter, by loss of the right to carry on operations within the State. Usually, the statutes use sweeping language in defining the prohibited acts, adopting commonly such all-inclusive phraseology as that of the federal act, which applies (so far as interstate commerce is affected) to "every contract, combination in the form of trust or otherwise, or conspiracy in restraint of trade," and to "every person who shall monopolize or attempt to monopolize, or combine or conspire . . . to monopolize." Some of the statutes except combinations of laborers or of producers of agricultural products. An extreme statute, like that of Texas, sweeps the board without qualification, and calls on every corporation doing business in the State to make affidavit that it is engaged in no such nefarious

*The United States Industrial Commission has just published, as part of its preliminary report, the statutes and decisions on trusts and combinations, with a tabular digest of the provisions of the different statutes. The present writer was engaged on a similar survey of this mass of legislation, and had prepared an analysis of the laws, which, however, seems now superfluous in view of the Commission's comprehensive publication.

operations. In almost all of them, while there is general prohibition of combinations, there is also a declaration that they are against public policy. The same language is thus applied which the courts have used, when construing the common law, as to the validity of contracts believed to be dangerous to the public interest,—a phraseology which, as we shall see, has raised some perplexing legal questions.

194 No complete opinion, however, can be formed concerning the significance of these statutes without an examination of the cases decided by the courts in reference to them; for upon the interpretation placed upon a statute by the courts rests its importance.

Two fundamental questions have had to be decided by the courts concerning the majority of these statutes: First, under the Fifth and Fourteenth Amendments to the Constitution of the United States, were they constitutional? And, second, would the courts declare all combinations as described in the statutes illegal, or would they simply enforce criminal prosecution against those combinations which, under the common law, were illegal, though not criminal, as being unreasonable restraints upon trade? That is, would all combinations and monopolies, whether reasonable or unreasonable as regards trade, be held illegal and criminal under these statutes?

Let us first examine the cases upon the constitutional questions. Under the Fifth Amendment to the Constitution, "no person shall be deprived of life, liberty, or property, without due process of law." It was argued that a citizen is deprived of his liberty without due process of law when, by a general statute, he is deprived of the right to make contracts so as to form a monopoly. In the case of the Joint Traffic Association,^{*} where a combination of competing railroads engaged in interstate commerce was organized in a joint traffic association (the declared purpose being to control rates, and the provisions subjecting the road violating the agreement to a fine), the court held that the Sherman Anti-trust Act was not an interference with the liberty to make contracts guaranteed under the Fifth Amendment. The Constitution, the court said,

^{*} 171 *United States*, 505. I shall hereafter use the initials *U. S.* in referring to the Supreme Court decisions.

meant the right to enter into a *lawful* contract, and that there were many contracts which, while not themselves immoral or *mala in se*, could be prohibited by the legislature. In regard to interstate commerce, Congress could so exercise its legislative power; and the prohibition of such contracts is one of the reasonable necessities for the regulation of commerce. This decision settled, once for all, the question as to the constitutionality of these statutes under the Fifth Amendment.

The Fourteenth Amendment provides that "no State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States, nor shall any State deprive any person of life, liberty, or property, without due process of law." Upon this amendment there is no decision by the Supreme Court of the United States. But there are two cases on the point, one in Texas and one in Michigan, which have not been appealed. Moreover, the decisions of the Supreme Court of the United States in the slaughter-house cases and the oleomargarine cases would seem to show that, if an appeal were made, the decision in the Texas and Michigan cases would be sustained. The Texas case was that of the *Waters and Pierce Oil Co. v. State*,⁴⁴ where it was held that the act prohibiting combinations in restraint of trade was not obnoxious to the Fourteenth Amendment, but was a proper exercise of the police power of the State in the interest of the public welfare. The Michigan case, *Bingham v. Brands*,⁴⁵ came up upon a contract restricting the sale of lambs in a county in Michigan. The court held the anti-monopoly act constitutional on the grounds that whatever is injurious to the public is void from public policy; and, as a general rule, the immediate representatives of the people, in legislature assembled, are the fairest exponents of what public policy requires, being most familiar with the habits of the period and with the actual condition of commerce and trade. Hence a legislative enactment would seem to be the least objectionable form of an exposition of what is contrary to public policy.

The statutes, in the light of these decisions, may fairly be said to be constitutional; and the first of the two fundamental

⁴⁴ *South-western Reporter*, 336 (hereafter quoted as *S. W.*).

⁴⁵ *North-western Reporter*, 940 (hereafter quoted as *N. W.*).

questions is decided. The courts have not interpreted the Constitution narrowly, but have given as great an effect as possible to the intentions of the people and the legislatures.

In regard to our second fundamental question, the courts are not as unanimous as on the first; but there is a great preponderance of authority towards giving a strict interpretation to the language of the statutes.

The first cases on the subject arose under the Sherman Anti-trust Act in the circuit courts of the United States; and the trend of the decisions for some time was towards a limitation in the range of operations supposed to be invalid or punishable under the federal statute. In *United States v. Greenhut*² it was held that an indictment under the anti-trust act, which failed to allege that the defendants monopolized or conspired to monopolize trade or commerce among the several States or with foreign nations, did not state an offence, even though it did allege that acts were done *with intent* to monopolize the traffic in distilled spirits among the several States, and that free competition was destroyed in such traffic in one of the States. In *United States v. Nelson*,³ where there was an agreement between lumber dealers in the District of Columbia to raise the price of lumber 50 cents per thousand feet in advance of the market price, the court held that such an agreement was not a restraint upon trade within the meaning of the Sherman Anti-trust Act, unless it involved an absorption of the entire traffic and was entered into for the purpose of monopolizing trade with the object of extortion. In *re Green*⁴ was a case where the court rendered a similar decision, deciding that, to constitute the offence of monopolizing trade, it was necessary to acquire or attempt to acquire an exclusive right in such commerce by means which would prevent others from engaging in it. There was an agreement by which the several parties agreed not to sell certain distillery products, and in return were given a rebate upon the liquor sold by them. The court held that this agreement was no restraint upon trade, because the purchaser was not bound to perform the conditions. When the sale was made, it could not have this effect, because it had no retroactive power to create a valid contract prior to

² 50 Federal Reporter, 469 (hereafter quoted as F.).

³ 52 F. 646.

⁴ 52 F. 104.

the fulfilment of the conditions. But, even if the contract could be regarded as a bilateral agreement between the parties, the restraint imposed was only partial and reasonable in the protection of defendant's business, and was not of that general character necessary to constitute an unlawful contract in restraint of trade.

Other cases of similar tenor were *Dueber Watch Case Co. v. The E. Howard Watch and Clock Co.*,* where the court decided that an averment which did not specify the absorption or the attempt to absorb the entire market, or a large part of it, stated no cause of action. In *United States v. Patterson*†² an indictment was not sustained where it was not shown that there was a conspiracy to engross the entire market, but it was simply alleged that defendants purposed to drive competitors from the field. Finally, in the case of the *Prescott & A. C. R.R. Co. v. Atchison, T. & S. F. R.R. Co.*‡ it was held that a contract by which one railroad company arranged with another, to the exclusion of a third, an interchange of passengers and tickets, was not illegal and in restraint of trade, because it was not an unreasonable restriction.

In all these cases, decided by the circuit courts of the United States upon the Sherman Anti-trust Act, we see the principles of the old common law. The distinction between reasonable and unreasonable restraints upon trade runs through them, and the courts refused to declare any monopoly criminal which was not illegal under the common law. But, in the last of the decisions of the circuit courts, that of the *United States v. Coal Dealers' Association*,§ the court took the opposite view, holding that any combination which imposes a restraint upon interstate commerce is unlawful, whether such restraint be fair or not, and whether or no it has increased the price of the commodity dealt in. The reason for this change will be found in the decisions of the Supreme Court of the United States.

In *United States v. Trans-Missouri Freight Association*, where there was a combination between several competing railroads, under an agreement for forming an association to maintain reasonable rates without preventing or limiting competi-

* 55 F. 351.

† 55 F. 605.

‡ 73 F. 438.

§ 55 F. 252.

tion, the Circuit Court⁵ decided that Congress did not intend to include common carriers, which were subject to the act of February 4, 1887, within the provisions of the anti-trust act, this act being a special statute relating to combinations in the form of "trusts." Such an agreement as this was not an agreement, combination, or conspiracy in restraint of trade, and did not tend to monopolize trade and commerce within the meaning of this act. The case was appealed to the Circuit Court of Appeals,⁶ where the decision of the Circuit Court was sustained. 197 The court, moreover, laid down the rule that contracts, combinations in trust or otherwise, and conspiracies in restraint of trade under the anti-trust act are such as have been declared against public policy under the common law. Hence the reasonableness of the combination must be considered in each case. But, finally, on appeal to the Supreme Court, the case was decided the other way, and the two decisions given above were reversed. The court held that an agreement between railroads for maintaining rates and for organizing an association to enforce such rates was an agreement in restraint of trade and commerce under the anti-trust act, and such an agreement was in no manner authorized by the Interstate Commerce Act. "The contract, combinations in restraint of trade or otherwise, and conspiracies in restraint of trade or commerce include all contracts operating to restrain trade, whether legal or illegal at common law or whether the restraint is reasonable or unreasonable." Again, in the Joint Traffic Association case⁷ already mentioned, the court laid down the principle that Congress has the power to restrain railroads from effecting combinations which would have for their ultimate purpose the raising of rates and the stifling of competition, even though the present rates are reasonable.

The latest case, that of the *United States v. Addyston Pipe and Steel Co.*, arose under an agreement by which a number of companies manufacturing iron and steel pipe in different States formed a combination whereby a large part of the territory in which they did business was divided into "reserved cities" and "pay territory." "The reserved cities" were allotted to particular members of the combination, free of

⁵ 53 F. 440.

⁶ 53 F. 58.

⁷ 171 U. S. 505.

competition by the others, though business was done through pretended bids. In the "pay territory" all offers were submitted to a central committee, which awarded the contract to that member of the combination which agreed to pay the largest bonus to be divided among the others. The Circuit Court, adhering to its previous construction of the statute, decided that the agreement was not illegal. The agreement in this case was not unreasonable, therefore not contrary to the common law, consequently not in violation of the anti-trust act. The case was appealed to the Circuit Court of Appeals, where the decision of the Circuit Court was reversed on the ground that such a restraint as that involved in this agreement was contrary to the common law. It was not intended as a fair protection to the interests of the party in favor of whom it was made, but was large enough to interfere with the interests of the public. Such a restraint upon commerce could only be oppressive, and, in the eye of the law, unreasonable. Being void at common law, it must evidently come within the scope of this act, and must be contrary to it. On appeal to the Supreme Court a decision has just been given, affirming the holding of the Circuit Court of Appeals. In this last case, clearly the question as to the construction of this act did not come up, as the agreement was bad under any interpretation. We have, however, two decisions of the Supreme Court which distinctly lay down the principle that the language of the act is to be construed in accordance with its evident intention; and contracts or agreements which are in restraint of trade in interstate commerce, whether reasonable or unreasonable, are illegal, and are subject to injunction or to criminal prosecution under the act. Such, no doubt, was the intent of the legislators and of the voters; and their intent has been held by the Supreme Court to be adequately expressed in the statute.

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But how have the State courts construed the State statutes? Have they been as scrupulous as the Supreme Court, or have they attempted to put the construction of the circuit courts upon these statutes, in order, in a great measure, to destroy their efficacy?

73 F. 712.
2

75 F. 271.
31

In Texas the court, held, in *Anhaeuser-Busch Brewing Association v. Hauck*,* that parties to a combination to control the price of beer in a town cannot recover for breach of contract, though the dealers combined were not the only ones in the town and the price was not raised to consumers. Evidence that the combination was only to reduce expenses, the court said, would not be allowed to affect the plain import of the agreement. And similarly in Iowa, in the case of *Beckley v. Mulville*, it was decided that a combination of insurance companies for reasonable uniform rates was contrary to the anti-trust law, because any such combination whatever was illegal, whether reasonable or unreasonable.

In New York, however, the situation² is different. In *Cohen v. Berlin & Jones Envelope Co.*,† where there was a contract to supply the full product of an envelope manufactory to certain parties, who agreed in their turn not to sell below a certain price, and where the business was in a very precarious condition, the court held that the contract was not void in restraint of trade, because agreements which have for their object the realization of a fair price for the product manufactured and sold do not contravene any rule of public policy—even though, in some respects, they operate in restraint of trade. When the provisions of agreements among competitors tend beyond measures for self-protection, and therein endanger the public good, they should not be sustained. The apprehension of danger to the public interests, however, should rest upon evident grounds, and the courts should refrain from interfering with or restraining the conduct of the affairs of individuals or of corporations, unless their conduct, in some tangible form, threatens the welfare of the public. In *Rafferty v. Buffalo City Gas Co.*‡ a similar decision was rendered. A contract was made by a gas company to issue stock in exchange for all the stock of another concern, merely to prevent ruinous competition. The court held that such a contract was not illegal, on the same principle as that of the Cohen case.

Since the decisions in these cases, a more stringent statute has been enacted in New York (1899). On this statute the courts have not yet rendered an opinion.

* 21 S. W. 692.

† 86 New York State Reports, 588.

‡ 56 Ibid., 288.

192 Except in New York, all the courts of final appellate jurisdiction have refused to interpret the anti-trust statutes in a manner inconsistent with their evident intention. That the subject has not been brought up in more of the States having such laws goes to prove that the question outside of New York is substantially settled. From the point of view of the common law the decision of the New York courts would seem to rest upon the more obvious and equitable basis. Nothing is better established in law or more reasonable than that a combination which does not restrict trade in general is not usually disadvantageous to the public; and, if such combinations are not dangerous to the people, the reason for destroying them disappears. On the other hand, under our constitutional and legal system, the manifest duty of the courts (provided an act is constitutional) is to give effect to its intention. In view of the language used in these statutes, it would seem that the courts have been left no alternative. The New York courts, in their desire to give an equitable interpretation to the language of the New York statute, have gone farther than its language has justified; for the words used are fully as unconditional and clear as those employed in the other statutes, and would seem to call for the same interpretation.

R. C. DAVIS.

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NOTE.

The following additional cases have been decided upon points of minor importance:—

I. The scope required of contracts in order to bring them under the Sherman Anti-trust Act governing interstate commerce.

U. S. v. Hopkins, 82 F. 320.

Wiswall v. Scott, 86 F. 671.

U. S. v. Workmen's Amalgamated Council of New Orleans, 84 F. 994.

II. (A) Patents in form of trusts and combinations of patents are illegal.

Nat. Harrow Co. v. Quick, 61 F. 130.

The Same v. Heuch, 76 F. 667.

The Same v. E. Bennett & Sons, 47 N. Y. S. 462.

Contra:

Columbia Wire Co. v. Freeman Wire Co., 71 F. 352.

(B) Injunction will be granted against infringement of patents, even though the owners of patents are formed in an illegal combination.

Edison Electric Light Co. v. Sawyer Manufacturing Electric Co.,
53 F. 532.

(C) Combination to control copyrights are not illegal.

Murphy v. Christian Press Association, 55 N. Y. S. 597.

III. Defendant may plead as bar to recovery that plaintiff is a member of a monopoly.

Bishop v. American Pressers' Co., 41 N. E. 765.

Anhaeuser Busch Brewing Co. v. Hauck, 275 W. 692.

Contra:

Wiley v. Nat. Wall Paper Co., 70 Ill. App. 543.

Chas. E. Wisswall, 47 F. 802.

IV. Constructions of the State acts upon various subjects.

North Carolina:

Thrift v. Board of Commissioners of Elizabeth City, 30 S. E. 349.

Grey v. Commissioners of Cumberland Co., 29 S. E. 771.

Texas:

Queen's Insurance Co. v. State, 85 Texas, 250.

Columbia Carriage Co. v. Hatch, 47 S. W. 288.

Welch v. Phelps & Bigelow Windmill Co., 30 S. W. 71.

Illinois:

Coquard v. Nat. Linseed Oil Co., 67 Ill. App. 20.

St. Louis & C. R. R. Co. v. Postal Tel. Co., 51 N. E. 382.

Michigan:

Hitchcock v. Anthony, 83 F. 779.

Merts Capsule Co. v. U. S. Capsule Co., 67 F. 414.

Mississippi:

Am. Fire Insurance Co. v. State, 22 S. 99.

Nebraska:

Downing v. Lewis, 76 N. W. 900.

New York:

In Re Attorney-general, 47 N. Y. S. 883.

Baird v. Sheehan, 56 N. Y. S. 128.

Kansas:

State v. Phipps, 50 Kansas, 609.

NOTES AND MEMORANDA.

ETHNIC THEORIES AND MOVEMENTS OF POPULATION: A REJOINDER.

In the last number of the *Quarterly Journal of Economics*, Dr. John Cummings gives a comprehensive criticism of the methods and results of the school of so-called "anthropo-sociologists." It seems to me that in some respects his points are well taken; while at the same time in others he has failed clearly to set forth the peculiar relations which at the present time exist between sociology and the distinctively natural science of anthropology. In view of the fact that he has done me the honor of considerable quotation from *The Races of Europe*, I beg leave to submit a few additional comments upon the general situation.

In the first place, in full agreement with Dr. Cummings, it may fairly be urged in criticism of the typical "anthropo-sociologists" that they have utterly failed to reckon with or to eliminate the influences of social or physical environment before applying their universal criterion of race to the explanation of social phenomena. It is particularly in this respect that I have found their reasoning defective and unsatisfactory. My own position in this matter is fundamentally opposed to that of Ammon, Lapouge, and Closson.

The rather anomalous position which the anthropo-sociologists occupy becomes noticeable on comparing it with that of the advocates of natural selection in the biological sciences. For, as Dr. Cummings rightly observes, the main contribution which Ammon and Lapouge have made to science lies in their insistence upon selection as a vital force in social relations. Now in the great biological controversies, Weissman and Wallace have stood out rigidly for the all-sufficiency of such selection in accounting for the phenomena of evolution. Consequently, they limit the potency of heredity to a corresponding degree. As advocates of natural selection, they are perforce led to recognize, to a pronounced degree, the effi-

ciency of environmental influences, which constitute for them, of course, the effective agent in the struggle for existence in which the fittest alone survive. Such being the apparently logical relation between natural selection and environmental factors, it becomes a matter of interest to note the manner in which our anthropo-sociologists, emphasizing selective influences, nevertheless,—and, it seems to me, quite illogically,—refuse to accord any due recognition to the most potent factor operative in setting up such a selection; namely, environment.

The most serious defect in Dr. Cummings's criticisms would seem to lie in an entire confusion of two radically distinct provinces of analysis. One concerns the sociological or *mental* phases of ethnic distribution in Europe: the other has regard alone to the *physical* side of the same question. Because one happens to yield allegiance to the views of practically all the leading anthropologists in Europe to-day,—there is but one exception,—that there are in the main three distinct racial types to be detected, though with difficulty, beneath the mazes of confused characteristics; and because the so-called "anthropo-sociologists" happen to proceed from a similar physical base-line, the implication is offered that all those who accept either of these two views are of necessity launched upon the sea of vague speculation in the same "anthropo-sociological" boat. Granting that a fair field exists for difference of opinion as to whether three racial types or Deniker's ten best serve to explain the complicated phenomenon as we observe it to-day,—and I am fully content to rest the case upon the critique of Deniker in the *Journal of the Anthropological Institute of Great Britain* for 1898,—I submit that this problem has no more to do with the deductions of the anthropo-sociological school than the man in the moon. One is a problem as to the physical traits of a given population: the other concerns itself with mental and social attributes entirely. The "anthropo-sociologists" make the gratuitous assumption that certain mental traits always attach themselves to the same physical ones. I have striven manfully to disprove that any such connection exists, and that a large part of the mental characteristics of the population of Europe are attributable to physical and social environment, and not to race at all.

Let us distinctly bear in mind, then, that the sole question at issue between Dr. Cummings and myself is as to the number of physical or racial types into which the population of Europe may be resolved,—a question having nothing to do with sociology in any direct sense. The view which I have adopted—that three such ideal types exist—is no invention of an “anthropo-sociologist.” It dates from Broca’s discoveries in 1860. It was clearly formulated by Ecker in 1865, some years before Spencer’s *Principles of Sociology* saw the light. From that day to the appearance of Sergi’s *Arti e Italic* in 1898, the view has steadily gained the adherence of European natural scientists, the majority of whom probably never read a work on sociology. Dr. Cummings, in denying the existence of my “ideal racial types,” must face the facts which have sufficed to convince such men as Broca, Topinard, and Collignon in France; Beddoe, Haddon, and Keane in England; Sergi and Livi in Italy; Ranke and Von Luschan in Germany; Anutchin and Talko-Hryniewicz in Russia; Niederle and Matiegka in Bohemia; Sasse in Holland, Arbo in Norway, and a host of lesser lights all over Europe. His decidedly sceptical treatment of the analysis of “ideal” racial types—not “ideal” at all, as he seems to think, in the sense of being fanciful creations, but “ideal” in the sense that few living types are to be found not more or less damaged in the great historical mix-up to which they have been exposed—should be recognized as directed not against me, nor against the “anthropo-sociologist,” but against Topinard, the most noted physical anthropologist in Europe at the present time. To have “kept in the middle of the road” always exposes one to the disadvantage of being attacked from both sides. In doing so, and in standing out for *three* distinct “ideal” racial types in Europe to-day, I am criticised by Dr. Boas for too much subdivision, on the one hand, and by Deniker of Paris, on the other, for not having recognized ten races instead of three. Each is respectfully referred to the other for future discussion, while I beg leave to withdraw. It is for the critics who separate themselves from the majority view to justify their opinions.

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WITH the third volume (N-Z), published during this quarter, the *Dictionary of Political Economy*, edited by Mr. R. H. I. Palgrave, has been completed. Twelve years have passed since the first instalment of Volume I. appeared, and at times expectant students of economics have doubtless felt impatient at the slow progress of the undertaking. But the final instalment compensates for the delays, and redeems the promises of the editor and publishers. As compared with its great German rival, the *Handwörterbuch der Staatswissenschaften*, the Dictionary has an advantage, in containing a less proportion of matter which the mere lapse of time soon renders obsolete. While statistics and information on recent events are not neglected, the plan of the Dictionary has wisely been to publish on questions of principle and on historical topics such articles as will prove of permanent value; and its pages will long be turned to with profit. The economic public owes a great debt to the editor and his associates.

Meanwhile the Germans are indefatigably engaged in keeping their own publication fresh; and the second edition of the *Handwörterbuch*, begun in 1898, with the third volume just completed, has already come near the end of the letter F.

MESSRS. MACMILLAN, of New York, announce "The Citizen's Library of Economics, Politics, and Sociology," a series of volumes of moderate size on a wide range of topics, under the general editorial charge of Professor R. T. Ely, of the University of Wisconsin. Already issued are *Monopolies and Trusts*, by Professor Ely himself, and a theoretical volume on *The Economics of Distribution*, by Mr. J. A. Hobson, consisting in part of matter which has been published in articles contributed by the author to this Journal. Among the announced volumes on economic subjects are *Essays in the Monetary History of the United States*, by Professor C. J. Bullock, of Williams College, and *Economic Crises*, by Dr. E. D. Jones.

THE International Colonial Institute has completed, as the third series of its publications, the four imposing volumes

noticed in the Bibliography of this number, containing documents, on the land systems of the various tropical colonies. The Institute had already published, in its first series (1895-98), three similar volumes on the labor system, and especially on contract labor, in the several colonies; and it has in press another series on the railways of colonies and new countries. In these days of colonial expansion the publications of the Institute have added importance for American students.

THE *Preliminary Report of the Industrial Commission* contains a very brief report, in three pages, by the commission itself, recommending some legislation as to the mode of incorporation of industrial combinations and as to some amendments to the Interstate Commerce Act. The supplementary matter which follows, and makes up the bulk of the document, is the really valuable outcome of the investigation. A great mass of testimony was taken, which is printed in full in the second part of the *Report*, occupying thirteen hundred pages. On the basis of this the competent specialists employed by the commission have prepared and published in the first part: (1) a Review of the Evidence; (2) a discussion of the Effects of Combinations on Prices, by Professor J. W. Jenks; (3) a Topical Digest of the Evidence, by Dr. E. D. Durand, in which are summarily stated the ascertained facts concerning a dozen large combinations (sugar, whiskey, oil, tin plate, and so on). Here is material, and something more than material, for the better understanding of the situation, and so for appropriate legislative action.

In addition the commission has published a separate document on legislation and adjudication relating to combinations, which again has been prepared by Professor Jenks. Here are given the statutes of the United States and of the several States in full, a digest of the decisions on them in the courts, and an elaborate conspectus in tabular form of the provisions of the different acts.

The commission has taken a mass of testimony on transportation, and has instituted an investigation on convict labor; and publications on these subjects also are to be expected at an early date.

IN the *Bulletin of the Department of Labor* for March, Professor R. P. Falkner presents the results of an important investigation on wholesale prices in the United States during the ten years 1890-99. The investigation was undertaken with the aid of the Department of Labor, for the purpose of continuing the well-known figures published in the Aldrich Report of 1893; and this end has been, on the whole, accomplished. While it did not prove possible to secure quotations of prices for all the articles included in the earlier inquiry,—partly because the precise goods or qualities were no longer dealt in, partly because the same sources of information were not always available,—a sufficient proportion of the same articles could be followed to make comparison reasonably safe and instructive. Some changes in the manipulation of the figures have also been made, all in the way of improvement. For the details of the investigation and its methods the reader is referred to Professor Falkner's full and able discussion. Some of the main results may be here noted.

The index numbers, on the method of simple arithmetical average, are as follows:—

90 articles, included both in the present investigation and in that of 1893 (Aldrich Report).			
	1	2	3
	All articles (90) of the pres- ent investigation.*	On the same basis as in Column 1.	On the basis of 100 for the prices of 1890.
January, 1890 . . .	102.0	101.7	97.5
1891 . . .	100.6	100.8	96.6
1892 . . .	96.5	96.4	92.4
1893 . . .	97.2	97.3	93.2
1894 . . .	89.6	89.8	86.1
1895 . . .	84.7	85.1	81.5
1896 . . .	85.2	85.1	81.5
1897 . . .	82.0	82.0	78.6
1898 . . .	83.3	83.9	80.4
1899 . . .	86.5	87.2	83.6

As in the earlier investigation, a weighted mean was calculated, again on the budget method, the several articles being

* Strictly speaking, 142 articles were included in the inquiry; but they were grouped under 99 heads, some sets of commodities (e.g., Boston crackers, ship-bread, oyster crackers, and soda crackers) being treated as one.

assigned weight according to the proportion of expenditure on them by workingmen's families. The difficulties of this method are familiar. All items of expenditure in such budgets cannot be brought into line with the articles whose prices are ascertained,—in the present case, after more or less of manipulation and supposition, 68.6 per cent. of expenditure only could be so distributed. What is quite as important to note, retail prices and not wholesale are most significant in relation to the budgets. None the less, the index numbers derived by this method are of interest and value, if only as showing how far they agree with those derived by simple arithmetical mean. For convenience of comparison the last-named figures (simple average) are given again, side by side with those of the budget-weight method.

	<i>Simple average.</i>	<i>Weighted average (68.6% of expenditure being accounted for).</i>
January, 1890	102.0	100.2
1891	100.6	103.2
1892	96.5	100.1
1893	97.2	105.0
1894	89.6	96.4
1895	84.7	90.5
1896	85.2	89.5
1897	82.0	85.9
1898	83.3	86.8
1899	86.5	86.8

The differences in result are due mainly to the great proportion of expenditure on food in workingmen's budget; the striking discrepancy in 1893, for example, being accounted for at once by the high prices of food at that time.

The figures unmistakably show that a marked fall in prices took place during the decade, but show also the signs of the upward movement which began after 1897 (low-water mark in every column), and has continued with accelerated pace through 1900.

F. W. T.

THE formal opening by the Prince of Wales, on March 3, of the last of the buildings erected by the London County Council on what is known as "the Boundary-street area,"

marks the completion of the largest single operation in the nature of municipal housing hitherto undertaken by any public authority. The area in question—a rectangular block at the edge of the parish of Bethnal Green where it touches the parish of Shoreditch—is fifteen acres in extent. Prior to 1892 it was one of the worst of the slums, if not the worst, in London. It had been laid out, two centuries or more ago, in narrow streets of small houses, two or three stories high, with little yards at the back. For some time it probably furnished a fairly comfortable place of residence for decent artisans, among others for many of the Huguenot silk weavers who came to England after the revocation of the Edict of Nantes. But the dwellings were poorly built, and on insecure foundations or none at all. The houses began to sink, so that many of the ground-floor rooms became cellars; and in some cases the yards were built upon. As the houses became less attractive, they were peopled by a lower class of tenants; so that more than half a century ago the district was already notorious for disease and crime. What it has been of late years may be seen at a glance by a reference to Mr. Charles Booth's map, where its dark blue of extreme poverty and its black of criminality catch the eye even in the midst of the sombre coloring of the East End. The reader who has the nerve for it and can allow for "the pathetic fallacy" may make acquaintance with the inner life of the district in Mr. Arthur Morrison's *Tales of Mean Streets* and *Child of the Jago*.

With the exception of two or three factories and warehouses, the whole area has been swept clear by the County Council. The new habitations do not even follow the lines of the old streets. The checker-board of narrow streets and alleys has been replaced by a central public garden, with wide, tree-planted avenues radiating from it, like the spokes of a wheel. This sacrifice of space for the sake of light and air has been made up for, so far as housing is concerned, by erecting buildings of five stories, so that the district now accommodates, under immeasurably superior sanitary conditions, almost as many persons as before its re-creation (5,880 as compared with 5,566).

But not the same persons or the same class of persons; and there's the rub! Even if the rents of the new tenements had been nominally the same per room as those of the old, the conditions imposed by the London County Council as to overcrowding and uncleanness would infallibly have driven away the more degraded part of the population. It is the universal experience in such circumstances. As it was, the cost of the improvement—about half a million pounds sterling for the acquisition of the site, and a like sum for the rehousing—has involved rentals of 6s. for two rooms per week and 8s. 6d. for three, which have put them beyond the means of casual laborers as well as, in many cases, of the workers in the "sweated" industries. A superior class of workmen has entered into this "model village," and the old inhabitants have crowded into the adjacent streets.

Opinions will differ as to the deductions to be drawn from this fact. There seems no reason to suppose that there was any unnecessary expenditure upon the buildings as planned by the architects. The "Works Department," which has caused so much discussion, constructed only a few of the blocks: the rest were put into the hands of well-known contractors. And both Department and contractors were stimulated by rivalry to do their best. It is argued by some that in future operations the Council should content itself with less road space, higher buildings, and smaller rooms; by others, that it could make a better financial showing if it were allowed to sell part of the cleared space for business purposes, and also to buy cheaper land in the neighborhood for the housing of the excess population; while others argue for the acquisition of land and the building of tenements outside municipal limits, in conjunction with a system of cheap rapid transit.

It is worth while adding that streets named after Calvin, Rochelle, and Palissy will henceforth remind the new inhabitants of some of the older and better associations of the district; while the Arnold circus in the centre may recall to the mind of a visitor one of the most beautiful of Matthew Arnold's poems,—that entitled "East London."

W. J. A.

RECENT PUBLICATIONS UPON ECONOMICS.

Chiefly published or announced since February, 1900.

An asterisk prefixed to a title indicates a second and more detailed notice of a book announced in a previous number.

I. GENERAL WORKS, THEORY AND ITS HISTORY.

AFTALION (A.). L'œuvre économique de Simonde de Sismondi. Paris: A. Pedone. 1899. 8vo. 6 fr.

[A biography, summary, and critical and sympathetic study.]

ALEM (A.). Le marquis d'Argenson et l'économie politique au début du XVIII^e siècle. Pratiques mercantiles et théories libérales. Paris: A. Rousseau. 1900. 18mo. pp. 196. 3 fr.

[Setting forth the views of this "paladin of liberty" on agriculture, trade, finances. . .]

ALENGRY (F.). Essai historique et critique sur la sociologie chez Auguste Comte. Paris: F. Alcan. 1900. 8vo. pp. 512. 10 fr.

[An analysis and exposition of Comte's sociology and of its connection with positivism at large; criticism and judgment being avoided.]

ANITCHKOW (Michael). Krieg und Arbeit. Berlin: Puttkammer & Mühlbrecht. 1900. 8vo. pp. 615. 10 m.

BÖHM-BAWERK (E. v.). Einige strittige Fragen der Capitalstheorie. Vienna: W. Braumüller. 8vo. pp. 126. 3 m.

[Reprint of three articles in the Austrian Zeitschrift f. Volksw., noted from time to time in this bibliography.]

BOUTROUX (E., editor). Morale sociale: conférences professées au Collège des sciences sociales. Paris: Alcan. 8vo.

[Fourteen lectures delivered in 1898-99; among the authors being Messrs. Belot, Buisson, Gide, Sorel. . .]

BROGLIO D'AJAZO (R.). Il salario nella teoria e nella pratica. Camerino: tip. Marchi. 8vo. pp. 125.

[Discussing theory (1) among classic English writers, (2) in the second half of the 19th century.]

CURZON (E. de). Frédéric Le Play. Sa méthode, sa doctrine, son œuvre, son esprit. Paris. 1900. 12mo. 3.50 fr.

EINAUDI (L.). La rendita mineraria. Turin: Unione tip.-editr. 1900. 8vo. pp. 462.

[A scholarly and widely-ramifying investigation on the theory of the rent of mines, the history of mining for precious metals, diamonds, coal, petroleum, and the like, and the course of legislation. Public ownership, with partial compensation, is finally advocated.]

GIRAUD (E. de, Professor at Geneva). Histoire de l'économie sociale jusqu'à la fin du XVI^e siècle. Antiquité, moyen âge, renaissance, réformes. Paris: Giard et Brière. 1900. 8vo. 5 fr.

[Attention given chiefly to the history of economic thought in the later Middle Ages and the Renaissance; economic history disposed of in brief summaries.]

HOBSON (J. A.). The Economics of Distribution. New York: Mac-

- millan Co. 1900. 12mo. pp. 368. \$1.25.
 [In the Citizen's Library. Aims to reach a common law of price applicable to all exchanges; and to prove that all bargaining by which prices and distribution are settled is affected by elements of force resulting in economic rent to buyers or sellers.]
- KOSTANECKI (A.). Der wirthschaftliche Werth vom Standpunkte der geschichtlichen Forschung. Berlin: Puttkammer & Mühlbrecht. 8vo. pp. 225. 4 m.
 ["Versuch einer Morphologie des wirthschaftlichen Werthes."]
- LAPOUGE (G. Vacher de). L'Ar-yen: son rôle social. Cours libre de science politique professé à l'Université de Montpellier, 1889-90. Paris: A. Fontemoing. 1890. 8vo. pp. 689. 10 fr.
 [The preface states that the volume is based on stenographic notes of lectures, thereafter revised and annotated. The propositions of the author's previous book, *Les selections sociales*, are reaffirmed, and a further volume, *Contre la morale*, on the history of morals, is promised for early publication.]
- LILLY (William Samuel, Honorary Fellow of Peterhouse, Cambridge). First Principles of Politics. London: Murray; New York: Putnam's. 1896. 8vo. pp. ix, 322. \$2.50.
 [A solid and scholarly book, maintaining the principle of "Natural Right" as the foundation of politics. The foundation, end, origin, mechanism, corruption of the State are analyzed in successive chapters; with consideration of economic aspects chiefly in chapter iv., on the functions of the State.]
- MAYR (G. v.). Die Pflicht im Wirtschaftsleben. Tübingen: Laupp. 1900. 8vo. pp. 69. 1.40 m.
- NICHOLSON (J. Shield). Principles of Political Economy. Vol. II, Part II. [Completing the work.] London and New York: Macmillan.
 [Announced.]
- PALGRAVE (R. H. I., and others). Dictionary of Political Economy, Vol. III., N-Z. London and New York: Macmillan. pp. 784. \$6.
 [This concluding volume of the great Dictionary has elaborate indices to the whole.]
- PANIZZA (M.). Le tre leggi: saggio di psicofisiologia sociale. Rome: E. Loescher. 1899. 16mo. pp. 223. 4 l.
 [Anthropological character of man; the law of production; the law of property; social law and the social problem.]
- RICCA-SALERNO (G.). La teoria del salario nella storia delle dottrine e dei fatti economici. Palermo: A. Reber. 1900. 8vo. pp. 695. 12 l.
 [Book I. Wages and Capital; II. Historic Development of Wages; III. Wages and the Cost of Labor.]
- STEIN (L.). An der Wende des Jahrhunderts. Versuch einer Kulturphilosophie. Freiburg: J. C. B. Mohr. 8vo. 7.50 m.
 [Twenty essays, continuing and supplementing the author's *Die soziale Frage im Lichte der Philosophie*.]
- TARDE (G.). Essais de mélanges sociologiques. Paris: Masson. 1900. 8vo. 6 fr.
- THOMAS (P.). Essai sur quelques théories économiques dans le Corpus juris civilis. Paris: L. Larose. 8vo. pp. 124.
 [De la richesse; de la valeur; de la circulation des biens; du crédit.]
- TOPINARD (P.). Science et fol. L'anthropologie et la science sociale. Paris: Masson. 1900. 8vo. pp. 588.
 [In the second part of this volume the relations of anthropology to social science are discussed,—the social nature of man, the state of nature and the social state, and the like subjects.]
- VÉRON-DUVERGER. Études sur Forbonnais. Paris: Guillaumin. 1900. 8vo. pp. 238. 5 fr.
 [The author is grand-nephew of Forbonnais, whose career and works he describes.]
- In Periodicals.*
- ASTURARO (A.). La sociologia e la sua importanza nel movimento

- scientifico contemporaneo. Riv. Ital. di Sociol., Dec. [Reply to Loria; maintaining that sociology is a science on which economics rests.]
- BÖHM-BAWEK (E.). Einige strittige Fragen der Capitalstheorie. III. Zeitschr. f. Volksw., Soc.-Pol., u. Verw., 8. Heft 6. [Reply to criticisms by Dietzel, Philippovich, and Lexis; the last-named being found "ein moderner vulgär-ökonomischer Ableger der sozialistischen Ausbeutungslehre."]
- ELY (R. T.). A Decade of Economic Theory. Annals Amer. Acad. Pol. and Soc. Sci., March. [A survey of the writings of American economists, 1889-99.]
- EULENBURG (Franz). Ueber die Möglichkeit und die Aufgaben einer Socialpsychologie. Jahrb. f. Gesetzg., 24. Heft 1. [Akademische Antrittsrede, Leipzig, May 16, 1899. Psychology, History, Philosophy, Economics, Statistics, must co-operate on this borderland.]
- PARETO (V.). Sunto di alcuni capitali di un nuovo trattato di economia pura del Professore Pareto [to be continued]. Giorn. degli Econ., March.
- RACHFAHL (Felix). Zur Geschichte des Grundeigentums. Jahrb. f. Nat. Oek., 19. Heft 1 and 2. [In refutation of R. Hildebrand's Recht und Sitte auf den verschiedenen wirthschaftlichen Kultur-stufen.]
- ROSS (E. A.). Social Control, XIV., XV. Amer. Journ. of Sociol., Jan., March. [These instalments on Education and Custom.]
- SELLA (E.). La posizione di Francesco Ferrara fra gli economisti. Giorn. degli Econ., Feb. [An obituary notice.]
- SHERWOOD (S.). Influence of the Trust in the Development of Undertaking Genius. Yale Rev., Feb. ["The real function of the Trust is to get rid of the weak entrepreneur."]
- SIMMEL (G.). A Chapter in the Philosophy of Value. Amer. Journ. of Sociol., March. [Fragment, on the general conception of value, from a book on money shortly to be published in German.]
- SMALL (A. W.). I. The Scope of Sociology; II. The Development of Sociological Method. Amer. Journ. of Sociol., Jan., March.
- TANGORRA (V.). Degli indirizzi oggettivo e soggettivo in economia politica. Riv. Ital. di Sociol., Dec. [A general eclectic survey.]
- VAUTHIER (L. L.). Travail intellectuel et travail manuel. Rev. d'Econ. Pol., Jan.

II. SOCIAL QUESTIONS, LABOR AND CAPITAL.

- DESVEAUX (L.). Les grèves de chemins de fer en France et à l'étranger. Paris: Marchal et Billard. 1899. 8vo.
- [Some consideration of railway strikes elsewhere, especially in the United States, followed by detailed discussion of the French situation. Legislation is advocated such as to make strikes impossible.]
- HALL (Rev. T. C.). The Social Meaning of the Modern Religious Movement in England. New York: Scribner's. 1900. 8vo. pp. 298. \$1.50.
- [Lectures at the Union Theological Seminary, on the Evangelical Party, Broad Church and High Church, in their Relations to Factory Acts, Trade Unions, Settlements. . .]
- LLOYD (H. D.). A Country without Strikes: A Visit to the Compulsory Arbitration Courts of New Zealand. New York: Doubleday, Page & Co. 1900. 16mo. \$1. [Announced.]
- MAZAYER (C. M., docteur en droit, ingénieur). Les conditions de travail dans les chantiers de Paris. Paris: Giard et Brière. 1900. 8vo. 8 fr.
- PAUL-BONCOUR (J.). Le fédéralisme économique. Étude sur les rapports de l'individu et des

groupements professionnels. Préface de M. Waldeck-Rousseau. Paris: F. Alcan. 1900. 8vo. pp. 403. 8 fr.

[On the history and legal situation of associations as well as on modern problems; the trend being to show the usefulness and inevitableness of "sovereign" associations,—e.g., trade unions.]

RIS (J. A.). A Ten Years' War: An Account of the Battle with the Slum in New York. Boston: Houghton, Mifflin. 1900. 12mo. pp. 207. \$1.50.

[Contents: The Battle with the Slum; The Tenement House; The Tenant; The Gang; Reform by Humane Touch. . . . A hopeful and helpful book.]

SOULIER (P.). Les institutions de retraites des compagnies de chemins de fer. Paris: Guillaumin. 1900. 8vo. pp. 194. 10 fr.

TABOZZI (G.). I problemi del lavoro e del proletario e la legislazione sociale: studi sulla evoluzione del diritto . . . e la questione sociale. Tarentum: Frat. Martucci. 1899. 8vo. pp. 1000. 10 l.

[Book I. I problemi del lavoro; II. La legislazione sociale.]

ZACHER (Dr., editor). Die Arbeiterversicherung im Auslande. XI. Die Schweiz; XII. Belgien. Berlin: A. Troschel. 1900. 8vo. pp. 146, 77. 3, 2 m.

[These instalments complete the excellent series, in course of publication during the last two years, of booklets describing the legislation on labor insurance in the non-German states. The countries covered are Denmark, Sweden, Norway, France, England, Italy, Austro-Hungary, Russia, Finland, and the two above mentioned.]

In Periodicals.

BOSANQUET (Helen). People and Houses. Econ. Journ., March. [On the housing question in London, advocating pressure by sanitary authorities rather than improved housing accommodations in greater abundance.]

FESSENDEN (S. D.). Protection of Workmen in their Employment. Bulletin Dept. of Labor, Jan. [Summary of legislation and adjudication in the United States on blacklisting, boycotting, labor combinations. . . .]

HARWOOD (W. S.). Co-operation in the West. Atlantic Monthly, April. [Chiefly on co-operative creameries.]

JAY (R.). Le marchandage et le décret du 2 Mars, 1848. Rev. d'Econ. Pol., Feb. [Marchandage (contract-work) was prohibited by a decree of 1848, long obsolete, but in 1899 judicially held to be operative. Its pros and cons are considered.]

LOTMAR (P.). Die Tarifverträge zwischen Arbeitgebern und Arbeitnehmern. Archiv Soz. Gesetzg., 15, Heft 1, 2. [A systematic monograph, with special reference to German legal conditions, on Abgrenzung, Inhalt, Abschluss, Vermittlung, Koalition. . . .]

MAURENBRECHER (M.). The Recent Campaign against Labor Organizations in Germany. Amer. Journ. of Sociol., Jan.

MUSÉE SOCIAL. La grève des mineurs de la Loire et l'arbitrage. Feb. [Account of the strike of 1898-99, settled by arbitration.]

RAUCHBERG (H.). Die Berufs- und Gewerbezahlung von 1895. Archiv Soz. Gesetzg., 15, Heft 1, 2. [Continued. Berufsgliederung und soziale Schichtung are treated. A third instalment on this subject is to follow.]

WILLOUGHBY (W. F.). The General Savings and Old-age Pension Bank of Belgium. Journ. Polit. Econ., March. [Describing the operations of this semi-public and semi-benevolent institution.]

Foreign Labor Laws. Bulletin Dept. of Labor, Jan., March. [Continued. Belgium and Switzerland; Germany.]

UNSIGNED. Conciliation and Arbitration in Trade Disputes. Edin. Rev., Jan. [A survey of recent legislation and experience in England.]

III. SOCIALISM.

- BRASSEUR (A., ingénieur). La question sociale: étude sur les bases du collectivisme. Paris: Alcan. 1900. 8vo. 7.50 fr.
- CROCE (B.). Materialismo storico ed economia marxista. Saggi critici. Palermo: R. Sandron. 1900. 8vo. pp. 286. 3 l.
- [Collected essays, chiefly on Marxism, but also on Loria's doctrines and other allied topics.]
- DAMASCHKE (A.). Vom Gemeinde-Sozialismus. Berlin: J. Harwitz. 8vo. pp. 120. 1 m.
- [Heft 1, in Soziale Streitfragen: Beiträge zu den Kämpfen der Gegenwart; edited by A. Damaschke.]
- ELTZBACHER (P.). Der Anarchismus. Berlin: J. Guttentag. 1900. 8vo. pp. 317. 5 m.
- [The author is Privatdozent and Gerichtsassessor.]
- SAGOT (F.). Le communisme au nouveau monde. Réductions du Paraguay. Sociétés communistes des États-Unis. Étude d'histoire économique. Paris: Larose. 1900. 8vo. 5 fr.
- SAMBUC (M.). Le socialisme de Fourier. Paris: Larose. 1900. 8vo. pp. 213. 2.50 fr.

In Periodicals.

- VIGOUROUX (L.). Les villages communistes de l'Australie méridionale. Musée Social, March. [Preliminary report of an enquête on state-aided communities in South Australia.]
- WINSTON (A. P.). Socialism in the United States. Contemp. Rev., Jan.

IV. LAND.

- BRUNCKEN (E.). North American Forests and Forestry. Their Relations to the National Life of the American People. New York: G. P. Putnam's Sons. 1900. 8vo. pp. 271. 3 l.
- [The author was secretary of a recent Wisconsin Commission on Forestry. The book is a plea for careful legislation, addressed to the general public, somewhat florid in style, not severely accurate.]
- INSTITUT COLONIAL INTERNATIONAL. Le régime foncier aux colonies. Documents officiels. Brussels: The Institute (also A. Mertens). 1898-99. 8vo. 4 vols. Per vol., 20 fr.
- [These volumes give the text, in the original and in French translation, of the laws on land, preceded in each case by an historical introduction from a competent hand. Contents: I. British India and German Colonies; II. Congo State and French Colonies; III. Tunis, Erythria, Philippines; IV. Dutch East Indies.]
- KOCH (Georg). Die gesetzl. geschlossenen Hofgüter des badischen Schwarzwaldes. Freiburg: J. C. B. Mohr. 1900. 8vo. pp. 146. 4 m.
- [In Abhandlungen der badischen Hochschulen. 4 Bd., 1 Heft.]
- ROCQUIGNY (Comte de). Les syndicats agricoles et leur œuvre; avec une carte de la France divisée en unions de syndicats. Paris: A. Colin. 1900. 18mo. 4 fr.
- [In Bibliothèque du Musée Social.]
- VARIOUS. Geschichte der österreichischen Land- und Forstwirtschaft und ihrer Industrien, 1848-1898. Vienna: M. Perles. 8vo. 2 vols. pp. 825. 24 m.
- [“Festschrift zur Feier der 50 jähr. Wiederkehr der Thronbesteigg. des Kaisers.” Prepared by a committee of officials in the Austrian ministry of agriculture.]

V. POPULATION, EMIGRATION, AND COLONIES.

CAUDERLIER (G.). Les lois de la population et leur application à la Belgique. Brussels: J. B. Stevens. 1896. 8vo. pp. 572. 20 fr.

[A systematic inquiry on the general theory of population as well as on Belgian movements. Other volumes, on France and on England, are promised.]

LINDNER (Dr. Friedr.). Die unehelichen Geburten als Sozialphänomen. Beitrag zur Statistik der Bevölkerungsbeweg. im Königr. Bayern. Leipzig: A. Deichert. 1900. 8vo. pp. 248, 2 colored charts. 4.80 m.

[Volume VII. in Wirtschaftsa-

und Verwaltungstudien in besond. Berücksicht. Bayerns, edited by G. Schanz.]

NEUMANN (H.). Die unehelichen Kinder in Berlin. Jena: G. Fischer. 1900. 8vo. 2 m.

[The author is privatdozent at Berlin.]

In Periodicals.

LLANO (Antonio). Population and Wages. Amer. Journ. of Sociol., March. ["The psycho-economic check" of habits of comfort and luxury is becoming the *de facto* solution of the population problem.]

VI. TRANSPORTATION AND EXCHANGE.

ANTON (Priv.-Doc., Dr. G. K.). Der Mittellandkanal. Hamburg: Verlagsanstalt. 1900. 8vo. pp. 40. .75 m.

[In Sammlung Gemeinv. wiss. Vorträge, edited by R. Virchow.]

BAILLY (L.). L'avenir économique et financier des grandes compagnies de chemins de fer. Paris: Ch. Dunod. 8vo. pp. 29. 1.50 fr.

[The author, an engineer, concludes that earnings are likely to grow fast, present quotations of securities are too low, the future is brilliant alike for the companies and the State.]

BURMEISTER (H.). Geschichtliche Entwicklung des Gütertarifwesens der Eisenbahnen Deutschlands. Leipzig: Duncker & Humblot. 1899. 8vo. pp. 62. 1.40 m.

[A convenient summary, based largely on the well-known writings on the subject.]

COHN (G.). Zur Geschichte und Politik des Verkehrswesens. Stuttgart: F. Encke. 1900. 8vo. pp. 530. 14 m.

[Reprinted essays: three on British railway policy and experience, three on German problems of rail and water transportation, one on combinations, and one on

economics in England and the United States.]

EATON (J. S.). Railroad Operations: How to know them from a Study of Accounts and Statistics. New York: Railroad Gazette. 1900. 8vo. pp. 313. \$2.

[The author is statistician of the Lehigh Railway; the aim is "to enable railroad officers to get the meaning out of statistics of operation."]

HENDRICK (F.). Railway Control by Commissions. New York: Putnam's. 1900. 12mo. pp. 161. \$1.

[Railway regulation in the countries of Europe and in the United States summarily reviewed, concluding with an examination of the Massachusetts Commission, whose methods are commended as a model.]

JAUNEZ (V.). La navigation intérieure de l'Allemagne. Étude économique. Paris: Giard et Brière. 1900. 8vo. 5 fr.

NEW YORK. Report of the Committee on Canals of New York State. New York. 8vo. pp. 231.

[Printed for the Committee. In addition to the report proper there are appendices on European

- canals, cost of transportation, estimates of cost, and numerous statistical tables and data.]
- PAUER (Ob.-Insp. Doc. Alb.). *Lehrbuch d. Eisenbahn-Tarifwesens mit besond. Berücksicht. des Tarifwesens d. österreichisch-ungarischen Eisenbahnen.* Wien: Hof- u. Staatsdruckerei. 1900. 8vo. pp. 411. 6 m.
- SCHAYE (P. A.). *L'état et la marine marchande française.* Paris: Fontemoing. 8vo. 4 fr.
- In Periodicals.*
- BIERMER (Magnus). *Der Rhein-Elbe-Kanal.* *Jahrb. f. Gesetzg.*, 24, Heft 1. [To be concluded. The writer deems it cheaper to build the canal than to enlarge the railways so that they shall be able to handle the increasing traffic. Until very recently the Prussian ministry itself was divided on this point.]
- CASSEL (G.). *Grundsätze für die Bildung der Personentarife auf den Eisenbahnen* (first article). *Archiv f. Eisenb.*, Jan., March. [Advocates charging what the traffic will bear; and discusses attempts to ascertain the cost of specific passenger services.]
- JEBB (R.). *Canadian Trade with Great Britain.* *Contemp. Rev.*, Jan.
- JOHNSON (E. R.). *The Principles of Governmental Regulation of Railways.* *Pol. Sci. Quarterly*, March. [General principles—some perhaps vague—suggested as to the interest of owners, shippers, and the community.]
- KEMMANN. *Die interkontinentale Eisenbahn Amerikas.* *Archiv f. Eisenb.*, Jan., Feb. [Mainly an account of the trial surveys.]
- PROUTY (C. A.). *Railway Discriminations and Industrial Combinations.* *Annals Amer. Acad. Pol. and Soc. Sci.*, Jan. [Commissioner Prouty of the Interstate Commerce Commission points out how discrimination aids large shippers and combinations.]
- SCHUMACHER (Dr. Hermann). *Eisenbahnbau und Eisenbahnpläne in China.* [Continued.] *Archiv f. Eisenb.*, Jan.
- TUNELL (G. G.). *Reasonable Railway Mail Pay.* *Journ. Polit. Econ.*, March. [Discussion of certain views submitted by Professor H. C. Adams to a Congressional Committee.]
- WIEDENFELD (Dr. Kurt.). *Die wirtschaftliche Bedeutung der sibirischen Bahn.* (With map.) *Archiv f. Eisenb.*, March, April. [A summary of the German, French, and English literature upon the subject.]

VII. INTERNATIONAL TRADE AND CUSTOMS LAWS.

- * ARMITAGE-SMITH (G.). *The Free-trade Movement and its Results.* Chicago: H. S. Stone & Co. 1898. 12mo. pp. 244.
[Published at London, 1898, by Blackie, in the Victorian Era Series; lately put on the American market. A good summary, not severely critical, from the free-trader's point of view.]
- EHRENBERG (Dr. R.). *Handelspolitik.* Jena: G. Fischer. 8vo. pp. 95. 1.50 m.
[Five lectures delivered before the Verein für Volkswirtschaft und Gewerbe at Frankfurt.]
- GRABEIN (Dr. M.). *Die deutschen Getreidezölle der Zukunft.* Berlin: Puttkammer & Mühlbrecht. 1900. 8vo. pp. 98. 1.60 m.
- HAMAN (A.). *Der deutsch-russische Handels- und Schiffsverkehrsvertrag von 1894.* Leipzig: Duncker & Humblot. 1900. 8vo. pp. 102. 2.20 m.
[In Schmoller's *Forschungen*, vol. 17.]
- In Periodicals.*
- DAY (Clive). *Experience of the Dutch with Tropical Colonies. I. The Culture System.* *Yale Rev.*, Feb. ["The system as bad from a political as from an economic standpoint."]

FLUX (A. W.). The Flag and Trade: A Summary Review of the Trade of the Chief Colonial Countries. Journ. Statist. Soc., Sept. [Concluding that Great Britain in trade with colonies compares not unfavorably with France and Holland, and that the policy of exclusive privileges is not conspicuously efficient.]

SCHMOLLER (Gustav). Die Wand-

lungen in der europäischen Handelspolitik des 19 Jahrhunderts. Jahrb. f. Gesetzg., 24, Heft 1. [Germany, Austria, Italy, and France should co-operate to prevent the partition of the earth between Great Britain, the United States, and Russia, as well as the return of the last-named countries to a "brutal neo-mercantile system."]

VIII. MONEY, BANKING, CREDIT, AND PRICES.

CHRISTOF (M.). Das Bankwesen. Eine volkswirtschaftliche Studie. Klagenfurt: J. Heyn. 8vo. pp. 143. 1 m.

[The author is "Handelsschullehrer," the book apparently designed for classes in commercial schools.]

DEL MAR (A.). The History of Money in America from the Earliest Times to the Establishment of the Constitution. New York: The Cambridge Encycl. Co. 1899. 8vo. pp. 145. \$1.50.

[Discursive chapters, offering little fresh matter, on The Conquest, Spanish money, Colonial money, Continental currency, and the like, tinged by the author's well-known predilection for plentiful money.]

HELFFERICH (Karl). Studien über Geld- u. Bankwesen. Berlin: J. Guttentag. 1900. 8vo. pp. 266. 6 m.

[Essays on the historic, juridic, and economic aspects of monetary questions; the gold standard being upheld, as in the author's other writings.]

HEYN (Dr. Otto). Irrthümer auf dem Gebiete des Geldwesens. Berlin: Puttkammer & Mühlbrecht. 1900. 8vo. pp. 88. 2 m.

KINDER (F. S.). The Effects of Recent Changes in Monetary Standards on the Distribution of Wealth. Published for American Economic Assoc. New York: Macmillan Co. 1899. 12mo. pp. 93. 50 cts.

[Part I. The Effects on Prices; Part II. The Effects of Price

Changes on Distribution.—Interest and Rent, Profits, Wages. The period 1850-95 is covered; the general thesis that falling prices are an evil.]

KNOX (J. J.). A History of Banking in the United States. New York: Bradford Rhodes. 1900. 8vo. pp. 900. \$5.

[Part I. Banks under Federal Laws: first and second United States Banks, and the National Bank System, 1862-1900. Part II. Banking under State Laws: New England, Eastern, Southern, Western, Pacific States.]

MATSUKATA MASAYOSHI. Report on the Adoption of the Gold Standard in Japan. Tokio: Government Press. 1899. 8vo. pp. 404.

[A detailed and excellent official report, accompanied by statistical tables and documents; with an introductory sketch of the monetary history of Japan since 1870.]

SCHARLING (W.). Bankpolitik. Jena: G. Fischer. 1900. 8vo. pp. 383. 8 m.

UTLEY (A. J.). Bimetallism. Los Angeles, Cal.: The author. 1899. 12mo. pp. 256. \$1.

[Advocacy of bimetallism in general, and of free coinage at 16 to 1 by the United States; presenting intelligently the arguments for this policy.]

In Periodicals.

DENIS (H.). La Banque nationale et sa transformation en Banque d'État mutuelliste. Ann. de l'Inst. des Sci. Soc., Dec. [The

- text of a report, with accompanying proposals, looking to the transformation of the Belgian National Bank into a state bank.]
- DE WITT (B.). Are Legal-tender Laws ex-post-facto? *Pol. Sci. Quarterly*, March. [This question of constitutional interpretation is answered affirmatively.]
- FAULKNER (R. P.). Wholesale Prices: 1890 to 1899. *Bulletin Dept. of Labor*, March. [An important paper, supplementing the price figures of the Aldrich Report, and giving index numbers for the decade.]
- FLUX (A. W.). Some Old Trade Records re-examined: A Study in Price Movements during the Present Century. *Transact. Manchester Statist. Soc.*, 1898-99. [Prices in Great Britain, as shown by the relation of official to declared value of exports; an index number constructed.]
- FULLER (F. J.) and ROWAN (H. D.). Foreign Competition in relation to Banking. *Journ. Inst. of Bankers*, Feb. [Some comparison of English banking practices with Continental.]
- MAYER (E. K.). Ueber die Annahme von Banknoten an öffentlichen Kassen. *Ann. des Deutsch. Reichs*, 33, No. 4. [On the discrimination against notes other than those of the Reichsbank, believed to curtail the usefulness of the banks issuing them.]
- MAYO-SMITH (R.). Prices and Individual Welfare. *Pol. Sci. Quarterly*, March. [As to the effects of falling prices, "not so disastrous as has often been supposed."]
- PADAN (R. S.). Prices and Index Numbers. *Journ. Polit. Econ.*, March. [The arithmetic mean "the only rigorous method," but to be modified by noting variations in proportional quantities.]

IX. FINANCE AND TAXATION.

- CADOUX (G.). Les finances de la ville de Paris de 1789 à 1900, suivies d'un essai de statistique comparative des charges communales des principales villes étrangères de 1878 à 1898. Paris: Berger-Levrault. 1899. 8vo. 15 fr.
- [The author is chef de bureau in the prefecture of the Seine. Debt, revenues, and expenses, financial effects of the political revolutions and the like subjects are treated.]
- CAYASSE (V.). Guide pratique du contribuable. Paris: Giard et Brière. 1899. 8vo. pp. 266. 2.50 fr.
- [A convenient manual, describing the working of the French tax system.]
- * CHAPMAN (S. J.). Local Government and State Aid: An Essay on the Effect on Local Administration and Finance of the Payment to Local Authorities of the Proceeds of Certain Imperial Taxes. London: Sonnenschein; New York: Scribner's. 12mo. pp. 147. \$1.
- [An essay first prepared for a prize at Owens College. The conclusion is in general against "imperial" aid. The series of acts on the subject is reviewed.]
- FLORA (F.). L'imposta sui redditi della ricchezza mobile in Italia. Milan: Soc. editr. lombarda. 8vo. pp. 136.
- [Reprinted from *Enciclopedia giuridica italiana*: a discussion of principles as well as of the situation in Italy.]
- HOLLANDER (J. H., editor). Studies in State Taxation, with particular reference to the Southern States. Baltimore: Johns Hopkins Press. 8vo. pp. 253. \$1.25.
- [Five essays by students and graduates of Johns Hopkins University on the tax legislation of Maryland, North Carolina, Kansas, Mississippi, Georgia. The outcome is not unfavorable to the system of the general property tax, which is found to be adapted to these communities.]
- JÄGER (Dr. Eng.). Die bayerische Steuerreform v. 1899. Speyer: Jäger. 8vo. pp. vii, 300. 2 m.

- ["Reform der Einkommen- Capitalrenten- u. Gewerbesteuer, gestaffelte Umsatzsteuer f. Waarenhäuser, Grossmühlen."]
- JASTROW (Dr. J., editor). Verhandlungen der Besprechung über kommunale Anleihen, Nürnberg, Oct. 12, 1899. Berlin: G. Reimer. 1900. 8vo. pp. 132. 4 m.
- [Stenographic report of proceedings, with appendix of statistics and statutes.]
- MAYR (Prof. Geo. v.). Flotte u. Finanzen. Die Deckungsfrage. Tübingen: H. Laupp. 1900. 8vo. pp. 27. .60 m.
- ROCHE (J.). Nos finances: finances et politique. Paris: E. Flammarion. 1899. 12mo. pp. 241.
- [A string of essays, addressed to the general public, on l'impôt sur le revenu (violently opposed), le bilan national (in a bad way), disarmament (cold water thrown on it), and the like topics.]
- SCHWARZ (O.) and STURTZ (G.). Der Staatshaushalt und die Finanzen Preussens. Berlin: J. Guttentag. 8vo. pp. x, 339. 9 m.
- [I. Lfg.: Domänen und Forstverwaltung. To be followed by nine further parts, the last ready in 1902. A comprehensive work of reference upon the finances and the budget of Prussia, kept to date by supplementary issues. The authors are "vortragende Räte im Finanzministerium."]
- SMART (Wm.). Taxation of Land Values and Single Tax. Glasgow: MacLehose; New York: Macmillan. 1900. 12mo. pp. 131. \$1.
- [Contents: I. The Theory of Taxation; II. Taxation of Land Values (proposals as to London and Glasgow described and condemned); III. The Single Tax (rejected).]
- WOLFRAM (G.) and PREUNER (J. B.). Gesetze über die direkten Steuern in Bayern vom 9 Juni, 1899. Munich: J. Lindauer. 2 vols. 8vo. pp. 274, 449.
- [Good editions, with introduction, comments, and administrative regulations, of the new tax laws. Band I. Einkommensteuer- und Kapitalrentensteuergesetz; Band II. Gewerbesteuergesetz.]
- In Periodicals.*
- BARLOW (M.). Tithe and its Rating. Econ. Journ., March. [A paper read before a Church Congress, discussing the English situation in detail.]
- BUCHENBERGER (Dr.). Die Steuerreform im Grossherzogtum Baden. Zugleich ein Beitrag zur Theorie der Vermögenssteuer. Zeitschrift f. d. ges. Staatsw., 56, Heft 2. [The present "Ertragssteuern" to be replaced by a property tax, with tax abatements for those of small means.]
- GRAF (F.). Die Tabackbesteuerung in Deutschland. Ann. des Deutsch. Reichs, 1900, Nos. 2 and 3. [Continued: on the legislation of 1879 and 1885, and the working of the tax. Further articles to follow.]
- HECKEL (Max von). Beiträge zur vergleichenden Finanzstatistik europäischer Grossstaaten im Jahre 1898. Jahrb. f. Nat. Oek., 19, Heft 1. [Chronological and comparative tables based on the budgets of Germany, Prussia, Austria, France, Great Britain, Italy, and Russia for 1891-98.]
- NIEDEN (Walter zur). Gebäudesteuer und Wohnungsfrage in Preussen. Jahrb. f. Gesetzg., 24, Heft 1. [The present system of basing taxes on rental value, the partial exemption of buildings used for business, and the practice of taxing unoccupied urban land as agricultural land, result in the undue taxation of the buildings occupied by the less well-to-do.]
- PABST (F.). Zur Beseitigung der kommunalen Grund- und Gebäudesteuer. Zeitschr. ges. Staatsw., 56, Heft 1. [Continued.]
- UNSIGNED. Preussische Finanzen. Ann. des Deutsch. Reichs, 33, No. 3. [Review of the changes in the four years ending with 1899.]

X. HISTORY, BIOGRAPHY, AND DESCRIPTION.

AVENEL (Vicomte G. d'). Le mécanisme de la vie moderne. 3^e série: la maison parisienne; l'alcool et les liqueurs; le chauffage; les courses. Paris: Colin. 10mo. pp. 340. 4 fr.

[Descriptive sketches on contemporary conditions in Paris.]

BOCH (R. v.). Geschichte der Töpferarbeit von Staffordshire im 19 Jahrhundert. Stuttgart: Cotta. 1899. 8vo. pp. 343.

[A minute history, with special regard to the conditions of labor.]

DIETRICH (B.). Die Spitzenindustrie in Belgien und Frankreich zu Ende des XIX. Jahrhunderts. Leipzig: Duncker & Humblot. 1900. 8vo. pp. 104. 3 m.

[With illustrations showing types of lace-making.]

LÉCOMTE (H.). Le café. Culture, manipulation, production. Paris: Carré et Naud. 1899. 8vo. 5 fr.

Le coton. Paris: Carré et Naud. 1900. 8vo. 9 fr.

[These volumes are in a series, to which this author is the main contributor, giving information not only on methods of cultivation, but on distribution, trade, consumption. The second has been crowned by the Academy of Moral and Political Sciences.]

LORINI (Eteocle). La Persia economica contemporanea e la sua questione monetaria. Monografia fatta per incarico del Ministero del Tesoro. Rome: E. Loescher. 1900. 8vo. pp. 540. 20 l.

[A sumptuous volume, describing fully the conditions of production and distribution, and then the monetary situation. The appendix gives statistics, charts, documents.]

MARSILLE (L.). Étude sur le communisme agraire: le mir russe. Caen: Valin. 1899. 8vo. pp. 197.

[The history, present position, inevitable future dissolution of the mir; and comparison with communities of India and Java, with the allmenden, and the like.]

MARTIN (G.). La grande industrie

en France sous le règne de Louis XV. Paris: A. Fontemoling. 1900. 8vo. 8 fr.

[Published by the Société des Études Historiques.]

SAYCE (A. H.). Babylonians and Assyrians: Life and Customs. London: Nimmo. 8vo. pp. 284. 5s.

[With chapters on Slavery, Agriculture, Trade, based on the contract tablets.]

VINCENT (J. E.). John Nixon, Pioneer of Steam Coal Trade in South Wales. A Memoir. London: Murray. 8vo. pp. 253. 10s. 6d.

WARD (G. W.). The Early Development of the Chesapeake & Ohio Canal Project. Baltimore: Johns Hopkins Press. 1899. 12mo. pp. 113. 50 cts.

[A survey of the whole history of the enterprise, with chief attention to the earlier period.]

In Periodicals.

CHEYNEY (E. P.). The Disappearance of English Serfdom. Eng. Hist. Rev., Jan.

Recent Writing on English History. Internat. Monthly, April. [A survey giving special attention to recent literature on economic history.]

COPPET (M. de). L'action économique des puissances en Chine. Ann. des Sci. Pol., Jan. [Helpful survey of the various contracts and concessions to date.]

DIETRICH (Handelskammersekretär Dr.). Die gegenwärtige wirtschaftliche Lage der Spitzenindustrie in Frankreich. Jahrb. f. Gesetzg., 24, Heft 1.

HEWART (Beatrice). The Cloth Trade in the North of England in the Sixteenth and Seventeenth Centuries. Econ. Journ., March.

JOHNSON (A. H.). Professor Ashley on the Commercial Legislation of England. Econ. Journ., March. [Suggesting that the burdensome effect of the legislation was understated.]

- MAMROTH (Karl.). Die agrarische Entwicklung Englands. Jahrb. f. Nat. Oek., 18, Heft 6. [Covers the period from the eleventh century to the nineteenth; a summary of the matter in the accepted authorities.]
- MARTIN (G.). Les manufactures au milieu du XVIII^e siècle. Inventions. Traité et manuels. Influences étrangères. Rev. d'Écon. Pol., Jan. [Chapter, published in advance, from the volume noted above.]
- MERTENS (Dr.). Die Naftaindustrie in Baku. Archiv f. Eisenb., March, April. [The Russian industry is turning to oil for fuel rather than for illumination.]
- NEUBURG (Dr. C.). Untersuchungen z. Geschichte des römischen Bergbaus. Zeitschr. ges. Staatsw., 56, Heft 1. [To be continued.]
- SIMKHOVITCH (Vl.). Recent Works on Russian Economic Conditions. Yale Rev., Feb.
- THOMPSON (H.). A Southern Mill Town. Pol. Sci. Quarterly, March. [Description of social conditions in a cotton manufacturing town of the South.]
- UNITED STATES. Commercial China in 1899. Monthly Summary of Commerce and Finance, Dec. [Elaborately compiled information and statistics on China; with map.]

XI. STATISTICS.

- BOWLEY (A. L.). Wages in the United Kingdom in the Nineteenth Century. Notes for the Use of Students of Social and Economic Questions. Cambridge: University Press; New York: Macmillan. 8vo. pp. 156. \$2.
[An excellent statistical inquiry, giving a general history of money wages in important trades, with discussion of methods and of sources of information. The "notes" were first prepared for the Newmarch Lectures at University College, London.]
- In Periodicals.*
- BOWLEY (A. L.). Statistics of Wages in the United Kingdom during the Last Hundred Years. IV. Agricultural Wages (concluded). Journ. Statist. Soc., Sept.
- CRAWFORD (R. F.). Notes on the Food Supply of the United Kingdom, Belgium, France, and Germany. Journ. Statist. Soc., Dec. [Estimates of the domestic product and the imports of grain, meat, milk, potatoes.]
- DYNES (J. H.). Development of the Plan for a Census of the World. Publ. Amer. Statist. Assoc., Dec. [Based mainly on an article by Korosi in Bulletin Int. Statist. Inst. The promise is good for securing comparable international statistics in or about 1900.]
- HEISZ (C.). Die deutsche Streikstatistik. Ann. des Deutsch. Reichs, 33, No. 4. [The value of the official quarterly publication on this topic begun in 1899 will be impaired by the police motive underlying it.]
- KOLLMANN (Dr. Paul). Die sociale Zusammensetzung der Bevölkerung im Deutschen Reiche [Continued]. Jahrb. f. Gesetzg., 24, Heft 1.
- MULHALL (M. G.). Forty years of British Trade. Contemp. Rev., March.
- TURQUAN (V.). Évaluation de la fortune privée en France. Rev. d'Écon. Pol., Feb. [Review of the calculations of various writers. To be continued.]
- UNITED STATES. The Grain Trade of the United States and the World's Wheat Supply. Monthly Summary of Commerce and Finance, Jan. [Chiefly statistics on all aspects of the question during the last half-century.]
- WOOD (G. H.). Some Statistics relating to Working Class Progress

since 1860. *Journ. Statist. Soc.*,
Dec. [Money, Wages, Unem-

ployment, Goods consumed per
head....]

XII. REPRINTS, TRANSLATIONS, AND NEW EDITIONS.

BRENTANO (L.). *Die Arbeitergilden der Gegenwart*. 1. Geschichte. 2. Kritik. Leipzig: Duncker & Humblot. 1900. 2 vols. 8vo. pp. 312, 383. 13 m.

[A new edition, "chemigraphically" reproduced and unchanged, of the book as published in 1871-72, which has long been out of print.]

CHALMERS (T.). *The Christian and Civic Economy of Large Towns*, abridged, with an introduction by Professor C. R. Henderson. New York: Scribner's. 1900. 8vo. pp. 361. \$1.25.

[This reprint of Chalmers's book of 1826, whose main subject is the mode of dealing with pauperism, is enriched by a biographic sketch, and a summary and criticism of his teaching, from the editor.]

COLAJANNI (N.). *Le socialisme*. Traduit sur la 2^e édition italienne, avec préface de G. Sorel. Paris: Giard et Brière. 1900. 18mo. 3.50 fr.

[The author is professor at Palermo and deputy in the Italian chamber. Contents: Socialism and science; biology; Malthus; the struggle for pleasure and the better place; the ethics of socialism....]

KIRKUP (T.). *A History of Socialism*. London: Black; New York: Macmillan. 8vo. pp. 272. \$2.

[Enlarged edition. The first edition appeared in 1892.]

PATTEN (S. N.). *Les fondements économiques de la protection*. Traduit par F. Lepelletier. Paris: Giard et Brière. 1900. 18mo. pp. 235. 2.50 fr.

In Periodicals.

GIDE (Ch.). *Les associations coopératives de production en France*. *Rev. d'Econ. Pol.*, Jan. [French version of the article published in this Journal in October, 1899.]

XIII. NOT CLASSIFIED.

AMERICAN ECONOMIC ASSOCIATION. *Papers and Proceedings of the Twelfth Annual Meeting*. New York: Macmillan. 1900. 8vo. pp. 291. \$1.

[Covering a wide range of subjects. Among the papers are A. T. Hadley, *Economic Theory and Political Morality*; R. T. Ely, *Senior's Theory of Monopolies*; H. C. Emery, *The Place of the Speculator*; C. S. Fairchild, *S. Sherwood, J. B. Dill, on Trust Questions*....]

BRENTANO (L.) and KUCZYNSKI (R.). *Die heutige Grundlage der deutschen Wehrkraft*. Stuttgart: J. G. Cotta. 1900. 8vo. 3.50 m.

[In *Münchener Volksw. Studien*. (1) Articles by Brentano maintain-

ing state supplies not less, but more recruits for the army; (2) criticisms by opponents; (3) rejoinder by Kuczynski.]

COLER (B. S.). *Municipal Government as illustrated by the Charter, Finances, and Public Charities of New York*. New York: Appleton. 1900. 12mo. \$1.

[By the Comptroller of New York, on the working of the new charter, with special regard to the conditions of the moment. Chapters on Charity, Income and Expenses, Water Supply, Transportation, as well as on political matters.]

GOREN (Aline). *Anglo-Saxons and Others*. New York: Scribner's. 1900. 12mo. pp. 158. \$1.50.

[Essays on Sociologists and

- Anglo-Saxons (anent Demolin's book), the Gospel of Action, Anglo-Saxon Humanitarianism, the Religious-commercial Instinct, the Higher Civilization . . . ; the final judgment not unfavorable to the Anglo-Saxons.]
- GUNTON (George). *Trusts and the Public*. New York: D. Appleton. 1900. 12mo. 50 cts.; cloth, \$1.
- ["The principle of trusts as an economic development is defended, abuses are pointed out and criticised."]
- HAHN (Ed.). *Die Wirtschaft der Welt am Ausgang des 19 Jahrhunderts*. Heidelberg: C. Winter. 1900. 8vo. pp. 328. 5.50 m.
- ["Eine wirtschaftsgeographische Kritik nebst einigen positiven Vorschlägen." Addressed to the general reader; critical alike as to Liberalismus and Sozialdemokratie; with divers proposals for reform as to land, speculation, taxation, labor.]
- HAUSSONVILLE (Comte d'). *Salaires et misères des femmes*. Paris: C. Lévy. pp. 314. 3.50 fr.
- [Especially on the pay and occupations of single women of some education.]
- McKIM (W. D.). *Heredity and Human Progress*. New York: G. P. Putnam's Sons. 12mo. \$1.50.
- [The human race to be elevated by artificial selection,—especially painless extinction of imbeciles, criminals, and the like.]
- MOURRE (Baron Ch.). *D'où vient la décadence économique de la France?* Paris: Plon. 1900. 12mo. pp. 460. 3 fr.
- [The decadence ascribed to the "gout pour le fonctionnairisme," and the neglect of private industry; this spirit being examined in the light of French history.]
- NATIONAL MUNICIPAL LEAGUE. *A Municipal Program: Report of a Committee . . . with Explanatory and Other Papers*. New York: Macmillan Co. 1900. 12mo. pp. 258. \$1.
- [This program, set forth in proposed constitutional amendments and statutes, was formally adopted by the League. It is accompanied by papers on public accounts, indebtedness, franchises, as well as on political organization.]
- NETTLETON (A. B.). *Trusts or Competition?* Chicago: Leon Publ. Co. 1900. 12mo. pp. 304. 50 cts.; cloth, \$1.
- [Two initial chapters state the arguments for and against trusts, —the latter having convinced the author. Excerpts from the opinions of others follow, largely addresses at the Chicago Conference; with other chapters on the Courts, Remedies, Legal Status.]
- PHILADELPHIA Commercial Museum. *Official Proceedings of the International Commercial Congress*, Oct. 12–Nov. 1, 1899. Philadelphia: The Museum. 1899. 4to. pp. 442. \$2.
- [Stenographic Reports of the Proceedings, covering all sorts of topics, and of all degrees of merit.]
- RATZEL (F.). *Das Meer als Quelle der Völkergrösse. Eine politisch-geographische Studie*. München: R. Oldenbourg. 1900. 8vo. pp. 91. 1.20 m.
- SIEGHART (R.). *Die öffentlichen Glücksspiele*. Vienna: Manz. 8vo. pp. 418.
- [Much historical material is given on the older kinds of lotteries and their connection with mercantilism. The Austrian lottery is discussed in detail.]
- UNITED STATES INDUSTRIAL COMMISSION. *Preliminary Report on Trusts and Industrial Combinations*. Washington: Government Printing Office. 1900. 8vo. pp. 1325, 291.
- [Vol. I., the Report proper, contains a brief report, a review of the evidence, charts by Professor Jenks on prices, a topical digest of the evidence, and finally a huge bulk of testimony, indexed at the close. Vol. II. contains the text of statutes on combinations (with a tabular digest), a digest of corporation laws, and a summary of judicial decisions.]
- VEREIN FÜR SOCIAL-POLITIK. *Verhandlungen der Generalversammlung 25–27 Sept., 1899*. Leipzig: Duncker & Humblot. 8vo. pp. 315. 7 m.

[Subjects and reporters: 1. Hausindustrie und ihre gesetzliche Regelung, Weber and Philippovich; 2. Das Hausiergewerbe in Deutschland, Stieda; 3. Entwicklungstendenzen im modernen Kleinhandel, Sombart, Rathgen, Rocke.]

In Periodicals.

- ALLEN (W. H.). Rural Sanitation in England. *Yale Rev.*, Feb. [Comparison is made with American practice.]
- BETTS (W. C.). The Philadelphia Commercial Museum. *Journ. Polit. Econ.*, March. [Eulogistic history and description.]
- CARUSO (C. D.). Grundelgenthum, Flächensteuer, Korinthen-naturalsteuer u. Korinthenbank in Griechenland. *Zeitschr. f. d. ges. Staatsw.*, 56, Heft 1. [The absence of proper surveys and records has resulted in uncertainty as to land titles, and blocked efforts at tax reform. The "currents-bank" is to serve the double purpose of raising the price by restricting the export supply, and making loans to small growers.]
- JENKS (J. W.). Publicity: A Remedy for the Evils of Trusts. *Amer. Rev. of Rev.*, April. [Brief summary of the Industrial Commission's Report and the proposed legislation in New York.]
- LERCH (Rudolf). Das Fahrrad und seine Bedeutung für die Volkswirtschaft. *Jahrb. f. Gesetzg.*, 24, Heft 1.
- SCHÄFFLE (A.). Zur socialwissenschaftlichen Theorie des Krieges. *Zeitschr. f. d. ges. Staatsw.*, 56, Heft 2. [Against disarmament. To be continued.]
- SCHUSTER (E.). The Promotion of Companies and the Valuation of Assets according to German Law. *Econ. Journ.*, March. [On the working of the German Act of 1884; found to be satisfactory.]
- WEST (M.). The Fourteenth Amendment in the Light of Recent Decisions. *Yale Rev.*, Feb. [Recent Supreme Court decisions so construe the amendment as not to restrict State legislation on labor and on taxation.]

APPENDIX.

THE CURRENCY ACT OF 1900.

An Act to define and fix the standard of value, to maintain the parity of all forms of money issued or coined by the United States, to refund the public debt, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the dollar consisting of twenty-five and eight-tenths grains of gold nine-tenths fine, as established by section thirty-five hundred and eleven of the Revised Statutes of the United States, shall be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity of value with this standard; and it shall be the duty of the Secretary of the Treasury to maintain such parity.

SECT. 2. That United States notes, and Treasury notes issued under the Act of July fourteenth, eighteen hundred and ninety, when presented to the Treasury for redemption, shall be redeemed in gold coin of the standard fixed in the first section of this Act, and in order to secure the prompt and certain redemption of such notes as herein provided it shall be the duty of the Secretary of the Treasury to set apart in the Treasury a reserve fund of one hundred and fifty million dollars in gold coin and bullion, which fund shall be used for such redemption purposes only, and whenever and as often as any of said notes shall be redeemed from said fund it shall be the duty of the Secretary of the Treasury to use said notes so redeemed to restore and maintain such reserve fund in the manner following, to wit: first, by exchanging the notes so redeemed for any gold coin in the general fund of the Treasury; second, by accepting deposits of gold coin at the Treasury or at any sub-treasury in exchange for the United States notes so redeemed; third, by procuring gold coin by the use of said notes, in accordance with the provisions of section thirty-seven hundred of the Revised Statutes of the United States.* If the Secretary of the Treasury is unable to restore and maintain the gold coin in the reserve fund by the foregoing methods, and the

*Sect. 3700. "The Secretary of the Treasury may purchase coin with any of the bonds and notes of the United States, authorised by law, at such rates and on such terms as he may deem most advantageous to the public interest." The act containing this proviso was passed March 17, 1902, less than a month after the passage of the first legal tender act.

amount of such gold coin and bullion in said fund shall at any time fall below one hundred million dollars, then it shall be his duty to restore the same to the maximum sum of one hundred and fifty million dollars by borrowing money on the credit of the United States, and for the debt thus incurred to issue and sell coupon or registered bonds of the United States, in such form as he may prescribe, in denominations of fifty dollars or any multiple thereof, bearing interest at the rate of not exceeding three per centum per annum, payable quarterly, such bonds to be payable at the pleasure of the United States after one year from the date of their issue, and to be payable, principal and interest, in gold coin of the present standard value, and to be exempt from the payment of all taxes or duties of the United States, as well as from taxation in any form by or under State, municipal, or local authority; and the gold coin received from the sale of said bonds shall first be covered into the general fund of the Treasury and then exchanged, in the manner hereinbefore provided, for an equal amount of the notes redeemed and held for exchange, and the Secretary of the Treasury may, in his discretion, use said notes in exchange for gold, or to purchase or redeem any bonds of the United States, or for any other lawful purpose the public interests may require, except that they shall not be used to meet deficiencies in the current revenues. That United States notes when redeemed in accordance with the provisions of this section shall be reissued, but shall be held in the reserve fund until exchanged for gold, as herein provided; and the gold coin and bullion in the reserve fund, together with the redeemed notes held for use as provided in this section, shall at no time exceed the maximum sum of one hundred and fifty million dollars.

SECT. 3. That nothing contained in this Act shall be construed to affect the legal tender quality as now provided by law of the silver dollar, or of any other money coined or issued by the United States.

SECT. 4. That there be established in the Treasury Department, as a part of the office of the Treasurer of the United States, divisions to be designated and known as the division of issue and the division of redemption, to which shall be assigned, respectively, under such regulations as the Secretary of the Treasury may approve, all records and accounts relating to the issue and redemption of United States notes, gold certificates, silver certificates, and currency certificates. There shall be transferred from the accounts of the general fund of the Treasury of the United States, and taken up on the books of said divisions, respectively, accounts relating to the reserve fund for the redemption of United States notes and Treasury notes, the gold coin held against outstanding gold certificates, the United States notes

held against outstanding currency certificates, and the silver dollars held against outstanding silver certificates, and each of the funds represented by these accounts shall be used for the redemption of the notes and certificates for which they are respectively pledged, and shall be used for no other purpose, the same being held as trust funds.

SECT. 5. That it shall be the duty of the Secretary of the Treasury, as fast as standard silver dollars are coined under the provisions of the Acts of July fourteenth, eighteen hundred and ninety, and June thirteenth, eighteen hundred and ninety-eight,* from bullion purchased under the Act of July fourteenth, eighteen hundred and ninety, to retire and cancel an equal amount of Treasury notes whenever received into the Treasury, either by exchange in accordance with the provisions of this Act or in the ordinary course of business; and upon the cancellation of Treasury notes silver certificates shall be issued against the silver dollars so coined.

SECT. 6. That the Secretary of the Treasury is hereby authorized and directed to receive deposits of gold coin with the Treasurer or any Assistant Treasurer of the United States in sums of not less than twenty dollars, and to issue gold certificates therefor in denominations of not less than twenty dollars; and the coin so deposited shall be retained in the Treasury and held for the payment of such certificates on demand, and used for no other purpose. Such certificates shall be receivable for customs, taxes, and all public dues; and when so received may be reissued, and when held by any national banking association may be counted as a part of its lawful reserve: *Provided*, That whenever and so long as the gold coin held in the reserve fund in the Treasury for the redemption of United States notes and Treasury notes shall fall and remain below one hundred million dollars the authority to issue certificates as herein provided shall be suspended: *And provided further*, That whenever and so long as the aggregate amount of United States notes and silver certificates in the general fund of the Treasury shall exceed sixty million dollars the Secretary of the Treasury may, in his discretion, suspend the issue of the certificates herein provided for: *And provided further*, That of the amount of such outstanding certificates one-fourth at least shall be in denominations of fifty dollars or less: *And provided further*, That the Secretary of the Treasury may, in his discretion, issue such certificates in denominations of ten thousand dollars, payable to order. And section fifty-one hundred and ninety-three of the Revised Statutes of the United States is hereby repealed.†

* The act of June 13, 1898 (the "war revenue" Act), called for the coinage each month of 1,500,000 silver dollars from this bullion.

† This section had authorized the issue to national banks of "currency certificates," i.e., certificates of the deposit of United States notes, now put an end to.

SECT. 7. That hereafter silver certificates shall be issued only of denominations of ten dollars and under, except that not exceeding in the aggregate ten per centum of the total volume of said certificates, in the discretion of the Secretary of the Treasury, may be issued in denominations of twenty dollars, fifty dollars, and one hundred dollars; and silver certificates of higher denomination than ten dollars, except as herein provided, shall, whenever received at the Treasury or redeemed, be retired and cancelled, and certificates of denominations of ten dollars or less shall be substituted therefor, and after such substitution, in whole or in part, a like volume of United States notes of less denomination than ten dollars shall from time to time be retired and cancelled; and notes of denominations of ten dollars and upward shall be reissued in substitution therefor, with like qualities and restrictions as those retired and cancelled.

SECT. 8. That the Secretary of the Treasury is hereby authorized to use, at his discretion, any silver bullion in the Treasury of the United States purchased under the Act of July fourteenth, eighteen hundred and ninety, for coinage into such denominations of subsidiary silver coin as may be necessary to meet the public requirements for such coin: *Provided*, That the amount of subsidiary silver coin outstanding shall not at any time exceed in the aggregate one hundred millions of dollars. Whenever any silver bullion purchased under the Act of July fourteenth, eighteen hundred and ninety, shall be used in the coinage of subsidiary silver coin, an amount of Treasury notes issued under said Act equal to the cost of the bullion contained in such coin shall be cancelled and not reissued.

SECT. 9. That the Secretary of the Treasury is hereby authorized and directed to cause all worn and uncurrent subsidiary silver coin of the United States now in the Treasury, and hereafter received, to be recoined, and to reimburse the Treasurer of the United States for the difference between the nominal or face value of such coin and the amount the same will produce in new coin from any moneys in the Treasury not otherwise appropriated.

SECT. 10. That section fifty-one hundred and thirty-eight* of the Revised Statutes is hereby amended so as to read as follows:—

"Sect. 5138. No association shall be organized with a less capital than one hundred thousand dollars, except that banks with a capital of not less than fifty thousand dollars may, with the approval of the Secretary of the Treasury, be organized in any place the population of which does not exceed six thousand inhabitants, [and except that banks with a capital of not less than twenty-five thousand dollars

* This amendment to section 5138 simply adds the words in brackets: otherwise, the section remains unchanged.

may, with the sanction of the Secretary of the Treasury, be organized in any place the population of which does not exceed three thousand inhabitants *]. No association shall be organized in a city the population of which exceeds fifty thousand persons with a capital of less than two hundred thousand dollars."

SECT. 11. That the Secretary of the Treasury is hereby authorized to receive at the Treasury any of the outstanding bonds of the United States bearing interest at five per centum per annum, payable February first, nineteen hundred and four, and any bonds of the United States bearing interest at four per centum per annum, payable July first, nineteen hundred and seven, and any bonds of the United States bearing interest at three per centum per annum, payable August first, nineteen hundred and eight, and to issue in exchange therefor an equal amount of coupon or registered bonds of the United States in such form as he may prescribe, in denominations of fifty dollars or any multiple thereof, bearing interest at the rate of two per centum per annum, payable quarterly, such bonds to be payable at the pleasure of the United States after thirty years from the date of their issue; and said bonds to be payable, principal and interest, in gold coin of the present standard value, and to be exempt from the payment of all taxes or duties of the United States, as well as from taxation in any form by or under State, municipal, or local authority: *Provided*, That such outstanding bonds may be received in exchange at a valuation not greater than their present worth to yield an income of two and one-quarter per centum per annum; and, in consideration of the reduction of interest effected, the Secretary of the Treasury is authorized to pay to the holders of the outstanding bonds surrendered for exchange, out of any money in the Treasury not otherwise appropriated, a sum not greater than the difference between their present worth, computed as aforesaid, and their par value, and the payments to be made hereunder shall be held to be payments on account of the sinking fund created by section thirty-six hundred and ninety-four of the Revised Statutes: * *And provided further*, That the two per centum bonds to be issued under the provisions of this Act shall be issued at not less than par, and they shall be numbered consecutively in the order of their issue, and when payment is made the last numbers issued shall be first paid, and this order shall be followed until all the bonds are paid, and whenever

*Sect. 3094. Contains the provision of the first legal tender act, calling for an annual payment of "one per cent. of the entire debt of the United States" into a sinking fund,—a fund which has been habitually created with such disregard of its steady and automatic operation that the modification here made is of little substantial importance.

any of the outstanding bonds are called for payment interest thereon shall cease three months after such call; and there is hereby appropriated out of any money in the Treasury not otherwise appropriated, to effect the exchanges of bonds provided for in this Act, a sum not exceeding one-fifteenth of one per centum of the face value of said bonds, to pay the expense of preparing and issuing the same and other expenses incident thereto.

SECT. 12. That upon the deposit with the Treasurer of the United States, by any national banking association, of any bonds of the United States in the manner provided by existing law, such association shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited; and any national banking association now having bonds on deposit for the security of circulating notes, and upon which an amount of circulating notes has been issued less than the par value of the bonds, shall be entitled, upon due application to the Comptroller of the Currency, to receive additional circulating notes in blank to an amount which will increase the circulating notes held by such association to the par value of the bonds deposited, such additional notes to be held and treated in the same way as circulating notes of national banking associations heretofore issued, and subject to all the provisions of law affecting such notes: *Provided*, That nothing herein contained shall be construed to modify or repeal the provisions of section fifty-one hundred and sixty-seven of the Revised Statutes of the United States, authorizing the Comptroller of the Currency to require additional deposits of bonds or of lawful money in case the market value of the bonds held to secure the circulating notes shall fall below the par value of the circulating notes outstanding for which such bonds may be deposited as security: * *And provided further*, That the circulating notes furnished to national banking associations under the provisions of this Act shall be of the denominations prescribed by law, except that no national banking association shall, after the passage of this Act, be entitled to receive from the Comptroller of the Currency, or to issue or reissue or place in circulation, more than one-third in amount of its circulating notes of the denomination of five dollars: *And provided further*, That the total amount of such notes issued to any such association may equal at any time, but shall not exceed, the amount at such time of its capital stock actually

* It will be noted that this section, as re-enacted, authorizes the Comptroller, but does not require him, to call for additional deposits in case the market value of the bonds falls below their par value. It is quite within the bounds of possibility that the new two per cent. bonds will fall below par.

paid in: * *And provided further*, That under regulations to be prescribed by the Secretary of the Treasury any national banking association may substitute the two per centum bonds issued under the provisions of this Act for any of the bonds deposited with the Treasurer to secure circulation or to secure deposits of public money; and so much of an Act entitled "An Act to enable national banking associations to extend their corporate existence, and for other purposes," approved July twelfth, eighteen hundred and eighty-two, as prohibits any national bank which makes any deposit of lawful money in order to withdraw its circulating notes from receiving any increase of its circulation for the period of six months from the time it made such deposit of lawful money for the purpose aforesaid, is hereby repealed, and all other Acts or parts of Acts inconsistent with the provisions of this section are hereby repealed.

SECT. 13. That every national banking association having on deposit, as provided by law, bonds of the United States bearing interest at the rate of two per centum per annum, issued under the provisions of this Act, to secure its circulating notes, shall pay to the Treasurer of the United States, in the months of January and July, a tax of one-fourth of one per centum each half-year upon the average amount of such of its notes in circulation as are based upon the deposit of said two per centum bonds; and such taxes shall be in lieu of existing taxes on its notes in circulation imposed by section fifty-two hundred and fourteen of the Revised Statutes.†

SECT. 14. That the provisions of this Act are not intended to preclude the accomplishment of international bimetallism whenever conditions shall make it expedient and practicable to secure the same by concurrent action of the leading commercial nations of the world and at a ratio which shall insure permanence of relative value between gold and silver.

Approved March 14, 1900.

* The rechartering act of 1882, section 10, had permitted banks to issue notes up to ninety per cent of their paid-in capital.

† The "existing taxes" as levied by section 5214 had been one-half of 1 per cent. each half-year; i.e., 1 per cent. a year.

TREASURY STATEMENTS,

FOR MARCH 13 AND 14, 1900.

[The statements here given are for the days immediately preceding and immediately following the passage of the Currency Act, and illustrate the readjustments called for by it.]

STATEMENT OF THE UNITED STATES TREASURY ON THE THIRTEENTH DAY OF MARCH, 1900.

CASH IN THE TREASURY.

Gold coin	\$288,166,694.80		
Gold bullion	127,889,340.99	\$416,056,035.88	
Outstanding gold certificates	\$212,947,779.00		
Less gold certificates in Treasury . .	40,408,449.00	172,539,330.00	\$243,516,705.88*
Standard silver dollars	—	\$409,938,837.00	
Outstanding silver certificates	\$408,378,504.00		
Less silver certificates in Treasury . .	6,174,783.00	402,203,721.00	7,735,116.00
Silver bullion	—	—	111,945.43
Standard silver dollars of 1890	\$9,373,308.00		
Silver bullion of 1890 (cost)	77,402,692.00	\$86,776,000.00	
Less outstanding Treasury notes . . .	—	86,776,000.00	
United States notes	—	\$27,524,293.00	
Outstanding currency certificates . . .	\$16,070,000.00		
Less currency certificates in Treasury,	915,000.00	15,155,000.00	12,369,293.00
Treasury notes of 1890	\$799,757.00		
National bank notes	3,769,548.42		
Fractional silver coin	5,308,565.12		
Fractional currency	80.34		
Minor coin	437,005.44		
Deposits in national banks	111,757,872.13		
Bonds and interest paid	429,081.05	\$122,501,909.50	
Less National Bank 5 per cent. fund . .	\$9,393,818.32		
Outstanding checks and drafts	6,881,502.39		
Disbursing officers' balances	57,164,550.91		
Post-office Department account	6,588,692.03		
Miscellaneous items	2,518,757.05	82,547,320.70	39,954,588.80
Available cash balance, including gold reserve			\$303,687,649.11

*Net gold and bullion, including \$100,000,000 reserved for redemption of United States notes, Section 12, Act July 12, 1892. [The section referred to in this annotation had provided that the issue of gold certificates should cease "whenever the amount of gold coin and bullion in the Treasury, reserved for the redemption of United States notes, falls below one hundred millions of dollars."]

STATEMENT OF THE UNITED STATES TREASURY ON THE FOURTEENTH DAY OF MARCH, 1900.

CASH IN THE TREASURY.

IN DIVISIONS OF ISSUE AND REDEMPTION.

Reserve Fund.

Gold coin and bullion in Division of Redemption \$150,000,000

Trust Funds.

Held for the redemption of the notes and certificates for which they are, respectively, pledged.

<i>Division of Redemption.</i>		<i>Division of Issue.</i>	
Gold coin	\$212,799,779	Gold certificates outstanding . . .	\$212,799,779
Silver dollars	408,447,504	Silver certificates outstanding . . .	408,447,504
Silver dollars of 1890 . . .	9,399,308	} Treasury notes outstanding . . .	86,770,000
Silver bullion of 1890 . . .	77,370,602		
United States notes . . .	15,045,000	Currency certificates outstanding . .	15,045,000
	<u>\$723,062,283</u>		<u>\$723,062,283</u>

GENERAL FUND.

Gold coin and bullion	\$53,418,410.23	
Gold certificates	41,117,182.00	
Standard silver dollars	1,510,973.00	
Silver certificates	6,132,998.00	
Silver bullion	113,314.93	
United States notes	12,264,358.00	
Treasury notes of 1890	773,563.00	
National bank notes	3,683,654.92	
Fractional silver coin	5,284,216.72	
Fractional currency	80.34	
Minor coin	434,701.32	\$124,733,542.46

In National Bank Depositories:—

To credit of Treasurer United States,	\$105,543,454.60	
To credit of disbursing officers . . .	6,064,276.78	\$111,607,731.47
Bonds and interest paid		<u>438,387.19</u>
		112,046,118.66
		<u>\$236,779,661.12</u>
Less National Bank 5 per cent. fund	\$9,427,702.52	
Outstanding checks and drafts	5,520,038.79	
Disbursing officers' balances	57,699,204.79	
Post-office Department account	6,631,525.11	
Miscellaneous items	2,515,200.29	81,793,671.50
		<u>\$154,985,989.62</u>